**Paul Schulman, please. Please return all attachments with search results. Thanks!

Access DB# 127912

SEARCH REQUEST FORM

RECEIVED JUL 23 2004

Scientific and Technical Information Center

10/622,524

Requester's Full Name: Molly Ceperley Examiner #: 59757 (STIC) Date: 07/23/04

Art Unit: 1641 Phone Number ~~30~~ 2-0813 Serial Number: ~~10/622,524~~ 10/622,524

Mail Box and Bldg/Room Location: Rem 3A51 Results Format Preferred (circle): PAPER DISK E-MAIL

↳ Rem 3C70

If more than one search is submitted, please prioritize searches in order of need. ME

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

See bibliographic data sheet attached

_____

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

① Please search for the antibody (broad) of claim 16. See drugs of page 1.

② Please search for the structure of claim 1 and each of the following terms:

antibody, antigen, immunogen, hapten, immunoassay, label, tracer, each of the compounds of claim 3, ovalbumin, polysaccharide, polylysine, +15

Amphetamine and Methamphetamine derivatives.

Considered. 09/14/04 MEC

```
=> d que
L7            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  MDEA/CN
L14           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  3,4-METHYLENEDIOXYAMPHETAMINE
                /CN
L15           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  ECSTASY/CN
L16           3 SEA FILE=REGISTRY ABB=ON  PLU=ON  BDB/CN
L17           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L16 AND "3,4"
L18           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  MBDB/CN
L19           2 SEA FILE=REGISTRY ABB=ON  PLU=ON  MDPA/CN
L22           1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L19 AND OCOC2/ESS
L23           7 SEA FILE=REGISTRY ABB=ON  PLU=ON  L14 OR L15 OR L7 OR L18 OR
                L17 OR L22
L24          10 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L23(L)?ANTIBOD?
L26         141 SEA FILE=HCAPLUS ABB=ON   PLU=ON  ?ANTIBOD?(5A)(MDA OR MDMA OR
                ECSTASY OR EVE OR MDEA OR BDB OR MBDB OR MDPA)
L27           7 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L26 AND L23
L28          11 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L24 OR L27

=> d l28 ibib ab hitind hitstr 1-11

L28  ANSWER 1 OF 11  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:331676  HCAPLUS
DOCUMENT NUMBER:          140:334030
TITLE:                    Derivatives, conjugates, and antibodies for
                          detecting ecstasy-class analytes
INVENTOR(S):              Hui, Raymond A.; Vitone, Stephen; Root, Richard Terry;
                          Baburina, Irina; Jordan, Sheri
PATENT ASSIGNEE(S):       Roche Diagnostics Corporation, USA
SOURCE:                   U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S.
                          Ser. No. 87,612.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:
```

this applica

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004077021	A1	20040422	US 2003-622524	20030718
US 2003170917	A1	20030911	US 2002-87612	20020301
JP 2004123692	A2	20040422	JP 2003-49992	20030226

PRIORITY APPLN. INFO.: US 2002-87612 A2 20020301
OTHER SOURCE(S): MARPAT 140:334030

AB Compds. including haptens, intermediates, and immunogens that are useful in the production of antibodies specific for the methylenedioxy class of amphetamine derivs. are described. Antibodies specific for the methylenedioxy class of amphetamine derivs., reagent kits containing antibodies specific for the methylenedioxy class of amphetamine derivs., methods of producing antibodies specific for the methylenedioxy class of amphetamine derivs., and methods of detecting analytes including members of the methylenedioxy class of amphetamine derivs. are also described.

IC ICM G01N033-53
NCL 435007100
CC 4-2 (Toxicology)
Section cross-reference(s): 1, 64
IT Antigens
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation)
(conjugates; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Haptens
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Antibodies and Immunoglobulins
Thyroglobulin
RL: RCT (Reactant); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Forensic analysis
(drug; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Immunoassay
(enzyme-linked immunosorbent assay; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Hemocyanins
RL: RCT (Reactant); RACT (Reactant or reagent)
(keyhole limpet; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Antibodies and Immunoglobulins
RL: RCT (Reactant); RACT (Reactant or reagent)
(monoclonal; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT Albumins, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(serum; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT 681028-35-3DP, conjugates with keyhole limpet hemocyanin
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(**MDMA** immunogen synthesis; derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT **82801-81-8**, 3,4-Methylenedioxy-N-ethylamphetamine
107447-03-0, 1-(3,4-Methylenedioxyphenyl)-2-butanamine
135795-90-3 590346-21-7
RL: ANT (Analyte); ANST (Analytical study)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT **42542-10-9**, **Ecstasy**
RL: ANT (Analyte); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT 681028-36-4DP, conjugates with keyhole limpet hemocyanin
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT 56-91-7, 4-Aminomethylbenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

IT 681028-37-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting

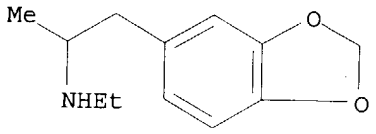
ecstasy-class analytes)

IT 590346-20-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

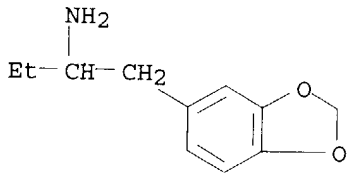
IT **4764-17-4P**, Methylenedioxyamphetamine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with Et bromobutyrate)

IT **82801-81-8**, 3,4-Methylenedioxy-N-ethylamphetamine
107447-03-0, 1-(3,4-Methylenedioxyphenyl)-2-butanamine
135795-90-3
RL: ANT (Analyte); ANST (Analytical study)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

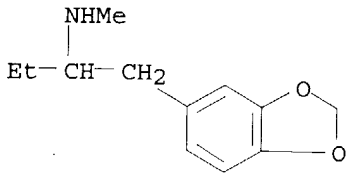
RN 82801-81-8 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N-ethyl-α-methyl- (9CI) (CA INDEX NAME)



RN 107447-03-0 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-ethyl- (9CI) (CA INDEX NAME)

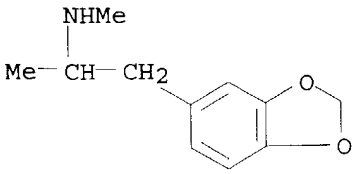


RN 135795-90-3 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-ethyl-N-methyl- (9CI) (CA INDEX NAME)

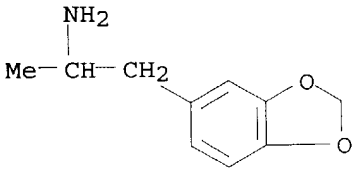


IT **42542-10-9**, **Ecstasy**
RL: ANT (Analyte); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting **ecstasy**-class analytes)

RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



IT **4764-17-4P**, Methylenedioxyamphetamine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with Et bromobutyrate)
RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)

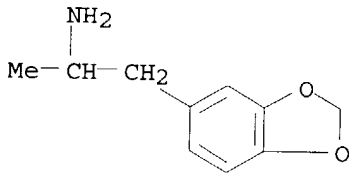


L28 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:693233 HCAPLUS
DOCUMENT NUMBER: 139:207730
TITLE: Antibodies for detecting amphetamine derivatives, compounds useful in antibody production, reagent kits, and detection methods for amphetamine derivatives
INVENTOR(S): Hui, Raymond A.
PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany; F. Hoffmann-La Roche A.-G.
SOURCE: Eur. Pat. Appl., 30 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

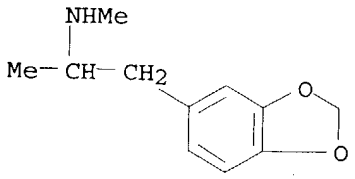
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1340981	A2	20030903	EP 2003-3298	20030225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2003175995	A1	20030918	US 2002-87469	20020301
JP 2004002316	A2	20040108	JP 2003-49924	20030226

PRIORITY APPLN. INFO.: US 2002-87469 A 20020301
OTHER SOURCE(S): MARPAT 139:207730
AB Compds. including haptens, intermediates, and immunogens that are useful in the production of antibodies specific for the methylenedioxy class of amphetamine derivs. are described. Antibodies specific for the methylenedioxy class of amphetamine derivs., reagent kits containing antibodies specific for the methylenedioxy class of amphetamine derivs., methods of producing antibodies specific for the methylenedioxy class of amphetamine derivs., and methods of detecting analytes including members

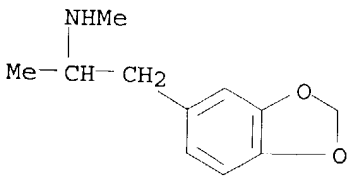
of the methylenedioxy class of amphetamine derivs. are also described.
IC ICM G01N033-94
ICS C07K016-00; C07D317-58
CC 1-1 (Pharmacology)
Section cross-reference(s): 15, 28
IT 300-62-9, Amphetamine 300-62-9D, Amphetamine, derivs. **4764-17-4**, **MDA 42542-10-9**, **MDMA 42542-10-9D**, **Ecstasy**, derivs. **74698-36-5**, **MDPA 82801-81-8**, **MDEA 107447-03-0**, **BDB 135795-90-3**, **MBDB**
RL: ANT (Analyte); ANST (Analytical study)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
IT **4764-17-4**, **MDA 42542-10-9**, **MDMA 42542-10-9D**, **Ecstasy**, derivs. **74698-36-5**, **MDPA 82801-81-8**, **MDEA 107447-03-0**, **BDB 135795-90-3**, **MBDB**
RL: ANT (Analyte); ANST (Analytical study)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)



RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)

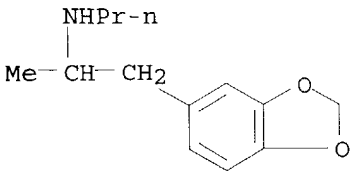


RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)

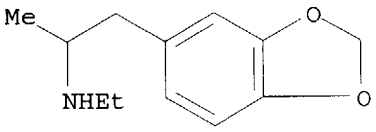


RN 74698-36-5 HCAPLUS

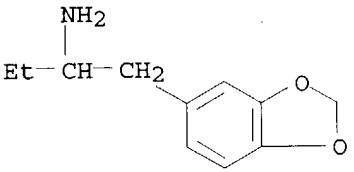
CN 1,3-Benzodioxole-5-ethanamine, α-methyl-N-propyl- (9CI) (CA INDEX NAME)



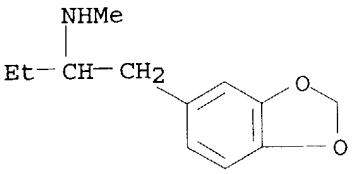
RN 82801-81-8 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N-ethyl-α-methyl- (9CI) (CA INDEX NAME)



RN 107447-03-0 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-ethyl- (9CI) (CA INDEX NAME)



RN 135795-90-3 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-ethyl-N-methyl- (9CI) (CA INDEX NAME)



L28 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:693232 HCAPLUS
DOCUMENT NUMBER: 139:207729
TITLE: Amphetamine derivatives, antibodies to the derivatives, reagent kits, methods of producing the antibodies, and methods of detecting the derivatives
INVENTOR(S): Hui, Raymond A.; Root, Richard T.; Vitone, Stephan S.
PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany; F. Hoffmann-La Roche A.-G.

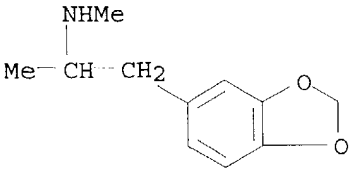
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1340980	A1	20030903	EP 2003-3297	20030225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2003170917	A1	20030911	US 2002-87612	20020301
JP 2004123692	A2	20040422	JP 2003-49992	20030226

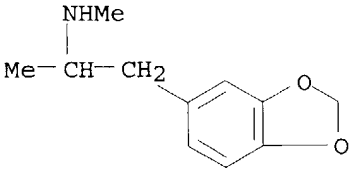
PRIORITY APPLN. INFO.: US 2002-87612 A 20020301
OTHER SOURCE(S): MARPAT 139:207729

AB Compds. including haptens, intermediates, and immunogens that are useful in the production of antibodies specific for the methylenedioxy class of amphetamine derivs. are described. Antibodies specific for the methylenedioxy class of amphetamine derivs., reagent kits containing antibodies specific for the methylenedioxy class of amphetamine derivs., methods of producing antibodies specific for the methylenedioxy class of amphetamine derivs., and methods of detecting analytes including members of the methylenedioxy class of amphetamine derivs. are also described.

IC ICM G01N033-94
ICS A61K031-135; C07C211-26
CC 1-1 (Pharmacology)
Section cross-reference(s): 15, 28
IT 300-62-9, Amphetamine 300-62-9D, Amphetamine, derivs. **42542-10-9**, **Ecstasy 42542-10-9D**, **Ecstasy**, derivs. **82801-81-8**, **MDEA**
RL: ANT (Analyte); ANST (Analytical study)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT 51-41-2, Norepinephrine 51-43-4, Adrenaline 51-64-9 51-67-2, Tyramine 90-82-4, Pseudoephedrine 122-09-8, Phentermine 156-34-3 299-42-3, Ephedrine 607-80-7, Sesamin 634-03-7, Phendimetrazine 14838-15-4, Phenylpropanolamine 33817-09-3 66142-89-0 66357-35-5, Ranitidine **74698-36-5**, MDPA **107447-03-0**, BDB **135795-90-3**, MBDB
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(cross-reactivity; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT **4764-17-4P**, MDA
RL: ANT (Analyte); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(cross-reactivity; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT **42542-10-9**, **Ecstasy 42542-10-9D**, **Ecstasy**, derivs. **82801-81-8**, **MDEA**
RL: ANT (Analyte); ANST (Analytical study)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



RN 82801-81-8 HCAPLUS
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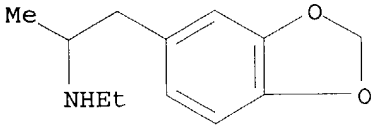
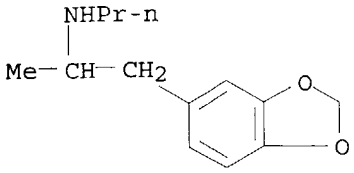
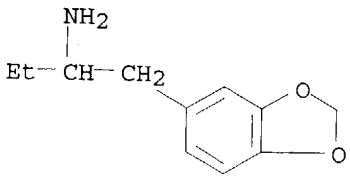


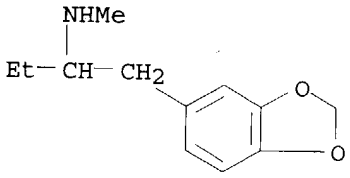
IT **74698-36-5**, MDPA **107447-03-0**, BDB **135795-90-3**, MBDB
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(cross-reactivity; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
RN 74698-36-5 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl-N-propyl- (9CI) (CA INDEX NAME)



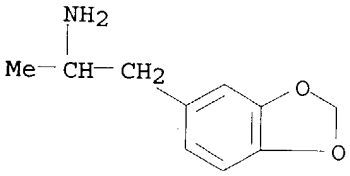
RN 107447-03-0 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-ethyl- (9CI) (CA INDEX NAME)



RN 135795-90-3 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-ethyl-N-methyl- (9CI) (CA INDEX NAME)



IT **4764-17-4P**, MDA
RL: ANT (Analyte); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(cross-reactivity; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:590958 HCAPLUS
DOCUMENT NUMBER: 139:132450
TITLE: Monoclonal and polyclonal antibodies for detecting and treating overdose, addiction and abuse of amphetamine or derivatives
INVENTOR(S): Pouletty, Philippe; Kusmierek, Jacques; Koralewski, Frederic; Galons, Herve; Blanchard, Dominique; Gadjou, Caroline
PATENT ASSIGNEE(S): Drugabuse Sciences, Inc., USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003061595	A2	20030731	WO 2003-US2076	20030122

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003171435	A1	20030911	US 2002-57791	20020123

PRIORITY APPLN. INFO.: US 2002-57791 A 20020123

OTHER SOURCE(S): MARPAT 139:132450

AB Hapten-carrier conjugates capable of eliciting anti-hapten antibodies in vivo to amphetamines are disclosed. Methods of preparing the hapten-carrier conjugates and therapeutic compns. are also disclosed. A therapeutic composition containing the hapten-carrier conjugate is useful in the treatment of addiction to amphetamines. Passive immunization using antibodies raised against conjugates of the instant invention also is disclosed. The therapeutic composition is suitable for co-therapy with other conventional drugs for treatment of amphetamine abuse.

IC ICM A61K

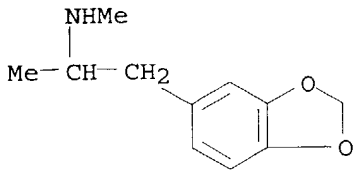
CC 15-2 (Immunochemistry)
Section cross-reference(s): 1, 3, 4, 9

IT 300-62-9D, Amphetamine, derivs. 457-87-4, N-Ethylamphetamine 14116-06-4, 4-Methylthio-amphetamine **42542-10-9**, **Ecstasy**
RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(monoclonal and polyclonal **antibodies** for detecting and treating overdose, addiction and abuse of amphetamine or derivs.)

IT **42542-10-9**, **Ecstasy**
RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(monoclonal and polyclonal **antibodies** for detecting and treating overdose, addiction and abuse of amphetamine or derivs.)

RN 42542-10-9 HCAPLUS

CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



L28 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:589502 HCAPLUS

DOCUMENT NUMBER: 139:133711

TITLE: Preparation of new amphetamine derivatives, antibodies against them and pharmaceutical compositions

containing them

INVENTOR(S): Pouletty, Philippe; Kusmierek, Jacques; Koralewski, Frederic; Galons, Herve; Blanchard, Dominique; Gadjou, Caroline; Danger, Yannic

PATENT ASSIGNEE(S): Drug Abuse Sciences, Inc., USA

SOURCE: Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1331219	A1	20030730	EP 2002-290169	20020123

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: EP 2002-290169 20020123

OTHER SOURCE(S): CASREACT 139:133711; MARPAT 139:133711

AB Hapten-carrier conjugates, (S)- I [R1, R3 = H, C1-3-alkyl; R2 = H, C1-3-alkyl, polymethylene chain, (CH2)nCO2H; n = 1 - 6; R4, R6, R7 = H, halogen, OR9, SR9; R9 = H, C1-3-alkyl; R5 = H, polymethylene chain, (CH2)mR10; R10 = CO2H, SH, CONHR13SH, CONHCHR11SH; R13 = CH(CO2H)CH2, (CH2)m; m = 1 - 4, with the proviso that R1 = H, R2 = Me or R1 = Me, R2 = H and R5 ≠ polymethylene chain, (CH2)nCO2H], capable of eliciting anti-hapten antibodies in vivo to amphetamines are disclosed. Methods of preparing the hapten-carrier conjugates and therapeutic compns. are also disclosed. A therapeutic composition containing the hapten-carrier conjugate is useful in the treatment of addiction to amphetamines. Passive immunization using antibodies raised against conjugates of the current invention is also disclosed. The therapeutic composition is suitable for co-therapy with other conventional drugs for treatment of amphetamine abuse.

IC ICM C07C229-14
ICS C07C217-60; C07C323-60; C07K016-44; A61K039-00; A61K039-385; A61K039-395; C12N005-20; C12N005-10; C12N015-79

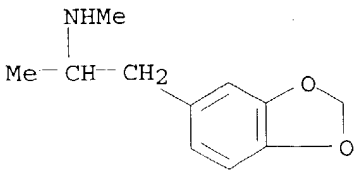
CC 31-2 (Alkaloids)
Section cross-reference(s): 1, 34, 63

IT 51-43-4, Epinephrine 51-61-6, 3-Hydroxytyramine, biological studies 64-13-1, 4-Methoxyamphetamine 299-42-3, Ephedrine 300-62-9, Amphetamine 457-87-4, N-Ethylamphetamine 3213-30-7 14116-06-4, 4-(Methylthio)amphetamine 14838-15-4, Norephedrine **42542-10-9**, **Ecstasy** 51018-28-1, Methylpseudoephedrine 113429-54-2, 4-Methoxymethamphetamine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of new amphetamine derivs., **antibodies** against them and pharmaceutical compns. containing them)

IT **42542-10-9**, **Ecstasy**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of new amphetamine derivs., **antibodies** against them and pharmaceutical compns. containing them)

RN 42542-10-9 HCAPLUS

CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:492553 HCAPLUS
DOCUMENT NUMBER: 139:51621
TITLE: Monoclonal antibody antagonists for treating medical problems associated with d-amphetamine-like drugs
INVENTOR(S): Owens, Samuel M.; Carroll, Frank Ivy; Abraham, Philip
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 839,549.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003119083	A1	20030626	US 2002-255462	20020926
US 2001051158	A1	20011213	US 2001-839549	20010420
US 6669937	B2	20031230		

PRIORITY APPLN. INFO.: US 2000-198902P P 20000420
US 2001-839549 A2 20010420

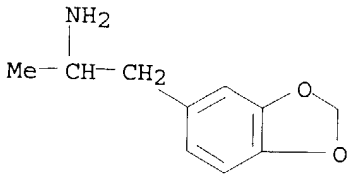
OTHER SOURCE(S): MARPAT 139:51621

AB The present invention provides synthetic immunochem. haptens for the generation of antibodies that are designed to recognize the common mol. features of d-methamphetamine-like abused stimulants with insignificant cross-reactivity to endogenous substrates (e.g. dopamine) or over-the-counter medications (e.g. l-methamphetamine, pseudoephedrine, phenylpropanolamine and ephedrine). The haptens comprise compound I [wherein R = ZR2COOR1; Z = O or S or single bond between R2 and ortho, meta, para attachment sites; R2 = alkyl, alkenyl, or alkynyl wherein the alkyl chain optionally contains O or NR3; R1 = H or R4; R3 = alkyl; and R4 = -CH2CH2CN, 4-nitrophenyl, pentafluorophenyl, succinimide, or 2,3,5-trichlorophenyl]. These monoclonal antibodies and their antigen binding fragments are useful in treatment plans for abuse, addiction, and overdose.

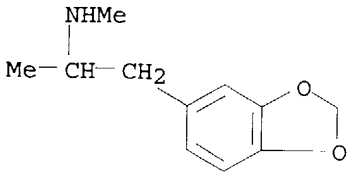
IC ICM G01N033-53
ICS G01N033-537; G01N033-543; C07K016-42
NCL 435007920; 530388100; 424130100
CC 15-3 (Immunochemistry)
Section cross-reference(s): 1, 25
IT **4764-17-4**, 3,4-Methylenedioxyamphetamine **42542-10-9**, 3,4-Methylenedioxymethamphetamine
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(monoclonal **antibodies** to d-methamphetamine and its analogs for immunotherapy of abuse, intoxication, and addiction)
IT **4764-17-4**, 3,4-Methylenedioxyamphetamine **42542-10-9**, 3,4-Methylenedioxymethamphetamine

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(monoclonal **antibodies** to d-methamphetamine and its analogs
for immunotherapy of abuse, intoxication, and addiction)

RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)



RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



L28 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:488680 HCAPLUS
DOCUMENT NUMBER: 139:48560
TITLE: Method and kit for detecting, or determining, 3,4-methylenedioxymethamphetamine
INVENTOR(S): Mcconnell, Robert Ivan; Benchikh, El Ouard; Fitzgerald, Stephen P.; Lamont, John Victor
PATENT ASSIGNEE(S): Randox Laboratories Ltd., UK
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

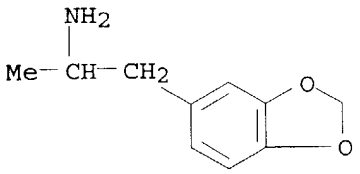
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1321772	A1	20030625	EP 2002-80462	20021217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CN 1429844	A	20030716	CN 2002-139960	20021220
US 2004121400	A1	20040624	US 2002-326742	20021220

PRIORITY APPLN. INFO.: EP 2001-205058 A 20011220
OTHER SOURCE(S): MARPAT 139:48560

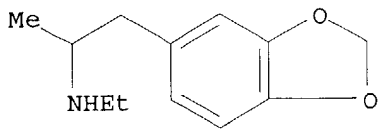
AB The present invention describes a hapten derivatized with a crosslinker at the N-position of 3,4-methylenedioxymethamphetamine (MDMA). The present invention provides an immunogen comprising the aforementioned hapten, coupled to an antigenicity-conferring carrier material, as well as, conjugates comprising the aforementioned hapten covalently bonded to a detectable labeling agent. In addition, the present invention concerns antibodies raised against the aforementioned immunogens. Finally, the

present invention relates to methods and kits for detecting or determining MDMA and N-alkylated derivs. of methylenedioxyamphetamine in biol. fluids. The antibodies of the present invention do not significantly cross-react with amphetamine and methamphetamine. Haptens and immunogens and horseradish peroxidase-labeled hapten reagents were prepared from (3,4-methylenedioxy)phenylacetic acid for the development of competitive ELISAs for MDMA.

IC ICM G01N033-94
CC 4-1 (Toxicology)
Section cross-reference(s): 15, 28
IT 90-82-4, (+)-Pseudoephedrine 156-34-3 299-42-3, (-)-Ephedrine 321-97-1, (-)-Pseudoephedrine 321-98-2, (+)-Ephedrine **4764-17-4**, **MDA 82801-81-8**, 3,4-Methylenedioxyethylamphetamine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**antibody** cross-reactivity with; immunoassay, haptens, reagents and kit for determining 3,4-methylenedioxymethamphetamine in body fluids)
IT **4764-17-4D**, Methylenedioxyamphetamine, N-alkylated derivs.
RL: ANT (Analyte); ANST (Analytical study)
(immunoassay, haptens, reagents and kit for determining 3,4-methylenedioxymethamphetamine in body fluids)
IT **42542-10-9P**, 3,4-Methylenedioxymethamphetamine
RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(immunoassay, haptens, reagents and kit for determining 3,4-methylenedioxymethamphetamine in body fluids)
IT **4764-17-4**, **MDA 82801-81-8**, 3,4-Methylenedioxyethylamphetamine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**antibody** cross-reactivity with; immunoassay, haptens, reagents and kit for determining 3,4-methylenedioxymethamphetamine in body fluids)
RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)

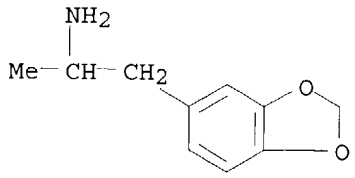


RN 82801-81-8 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N-ethyl-α-methyl- (9CI) (CA INDEX NAME)

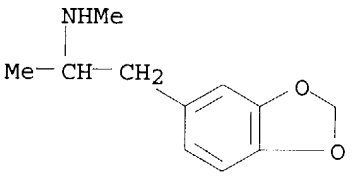


IT **4764-17-4D**, Methylenedioxyamphetamine, N-alkylated derivs.
RL: ANT (Analyte); ANST (Analytical study)
(immunoassay, haptens, reagents and kit for determining 3,4-

methylenedioxymethamphetamine in body fluids)
RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)



IT **42542-10-9P**, 3,4-Methylenedioxymethamphetamine
RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(immunoassay, haptens, reagents and kit for determining 3,4-methylenedioxymethamphetamine in body fluids)
RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:291807 HCAPLUS
DOCUMENT NUMBER: 139:159821
TITLE: Altered gene expression in frontal cortex and midbrain of 3,4-methylenedioxymethamphetamine (MDMA) treated mice: Differential regulation of GABA transporter subtypes
AUTHOR(S): Peng, Weiping; Simantov, Rabi
CORPORATE SOURCE: Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel
SOURCE: Journal of Neuroscience Research (2003), 72(2), 250-258
CODEN: JNREDK; ISSN: 0360-4012
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Changes in gene expression were examined in the brain of mice treated with a drug of abuse, 3,4-methylenedioxymethamphetamine (MDMA, also called Ecstasy). Frontal cortex and midbrain mRNA, analyzed by differential display polymerase chain reaction (DD-PCR) method, showed an altered expression of several cDNAs, 11 of which were isolated, cloned and sequenced. The sequence of one MDMA-induced mRNA corresponds (99.3%) to the mouse γ-amino butyric acid (GABA) transporter 1 (mGAT1). The established involvement of GABA neurotransmission in the activity of several abused drugs prompted us to focus herein on MDMA effect on the GABA transporter gene family. Semi-quant. PCR anal. with primers

selective to the reported mGAT1 sequence confirmed that MDMA treatment increased mGAT1 expression. Time-course study of the expression of the three GABA transporter subtypes showed that MDMA induced a differential temporal activation of mGAT1 and mGAT4, but had no effect on mGAT2. Quant. real-time PCR further proved the increased expression of mGAT1 and mGAT4 upon MDMA treatment. Western immunoblotting with anti-GAT1 **antibodies** showed that **MDMA** also increased GAT1 protein levels, suggesting that neurotransmission of GABA was altered. MDMA effect was also verified in serotonin transporter knockout (-/-) mice that are insensitive behaviorally to MDMA; the drug did not increase GAT1 protein level in these mutants. In mice, tiagabine and NO-711, inhibitors of GABA transporters, restrained MDMA-induced acute toxicity and death. These results should facilitate novel approaches to prevent deleterious effects, including fatality, induced by MDMA and similar abused psychostimulants.

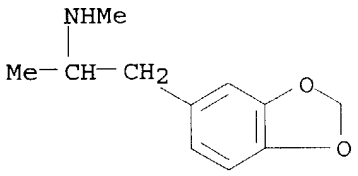
CC 1-11 (Pharmacology)

IT **42542-10-9**, 3,4-Methylenedioxymethamphetamine
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(MDMA toxicity and brain GABA transporters in relation to prevention of MDMA deleterious effects)

IT **42542-10-9**, 3,4-Methylenedioxymethamphetamine
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(MDMA toxicity and brain GABA transporters in relation to prevention of MDMA deleterious effects)

RN 42542-10-9 HCAPLUS

CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:242183 HCAPLUS
DOCUMENT NUMBER: 138:270293
TITLE: Vaccine compositions comprising anti-CD4 antibody or immunostimulatory nucleic acid and antigen-coupled virus-like particles for enhancement of immune responses
INVENTOR(S): Bachmann, Martin F.; Storni, Tazio; Lechner, Franziska
PATENT ASSIGNEE(S): Cytos Biotechnology A.-G., Switz.
SOURCE: PCT Int. Appl., 243 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003024480	A2	20030327	WO 2002-IB4252	20020916
WO 2003024480	A3	20031030		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003091593 A1 20030515 US 2002-243739 20020916

EP 1425040 A2 20040609 EP 2002-783338 20020916

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.: US 2001-318967P P 20010914

WO 2002-IB4252 W 20020916

AB The invention relates to the finding that stimulation of antigen presenting cell (APC) activation using substances such as anti-CD40 antibodies or DNA oligomers rich in non-methylated C and G (CpGs) can dramatically enhance the specific T cell response obtained after vaccination with recombinant virus like particles (VLPs) coupled, fused or otherwise attached to antigens. While vaccination with recombinant VLPs fused to a cytotoxic T cell (CTL) epitope of lymphocytic choriomeningitis virus induced low levels cytolytic activity only and did not induce efficient anti-viral protection, VLPs injected together with anti-CD40 antibodies or CpGs induced strong CTL activity and full anti-viral protection for treating tumors and chronic viral diseases. Thus, stimulation of APC-activation through antigen presenting cell activators such as anti-CD40 antibodies or CpGs can exhibit a potent adjuvant effect for vaccination with VLPs coupled, fused or attached otherwise to antigens.

IC ICM A61K039-00

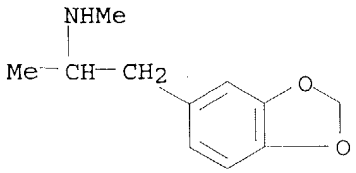
CC 15-3 (Immunochemistry)
Section cross-reference(s): 2, 3, 63

IT 50-36-2, Cocaine 50-37-3, LSD 54-04-6, Mescaline 54-11-5, Nicotine 57-27-2, Morphium, biological studies 76-57-3, Codeine 113-45-1, Methylphenidate 300-62-9, Amphetamine 437-38-7, Fentanyl 520-52-5, Psilocybin 537-46-2, Methamphetamine 561-27-3, Heroin 1972-08-3, Tetrahydrocannabinol 9001-92-7, Protease 9002-10-2, Tyrosinase 24939-03-5, Poly-(I:C) 26700-94-7, Poly-(I:C) **42542-10-9**, Methylenedioxymethamphetamine 65988-71-8, GD2 151705-84-9 502953-36-8 502953-37-9 502953-38-0 502953-39-1 502953-40-4 502953-41-5 502953-42-6 502953-43-7 502953-44-8 502953-45-9
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiviral and antitumor vaccines comprising anti-CD4 **antibody** or immunostimulatory nucleic acid and antigen-coupled virus-like particles for enhancement of immune responses and activation of antigen-presenting cells)

IT **42542-10-9**, Methylenedioxymethamphetamine
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiviral and antitumor vaccines comprising anti-CD4 **antibody** or immunostimulatory nucleic acid and antigen-coupled virus-like particles for enhancement of immune responses and activation of antigen-presenting cells)

RN 42542-10-9 HCAPLUS

CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



L28 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:798299 HCAPLUS
DOCUMENT NUMBER: 135:343302
TITLE: Monoclonal antibody antagonists for treating medical problems associated with d-amphetamine-like drugs
INVENTOR(S): Owens, Samuel M.; Carroll, Frank Ivy; Abraham, Philip
PATENT ASSIGNEE(S): Board of Trustees of the University of Arkansas, USA
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001081424	A1	20011101	WO 2001-US12899	20010420

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-198902P P 20000420
OTHER SOURCE(S): MARPAT 135:343302

AB The authors disclose the generation of antibodies designed to recognize the common mol. features of d-methamphetamine-like abused stimulants. The antibodies will have insignificant cross-reactivity with endogenous substrates (e.g. dopamine) or over-the-counter medications (e.g. l-methamphetamine, pseudoephedrine, phenylpropanolamine and ephedrine). These antibodies, and their antigen binding fragments, are useful in treatment plans for recovering addicts, in emergency room settings for rapidly reversing a drug overdose, in protection of fetuses or fetus from drug-abusing pregnant mothers or in a psychiatric setting to reduce the exacerbation of psychotic disorders caused by stimulant drugs.

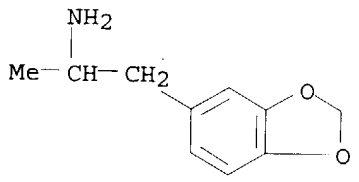
IC ICM C07K016-44
ICS C07K017-06; C07C229-02; C07D207-09

CC 15-3 (Immunochemistry)
Section cross-reference(s): 1, 31

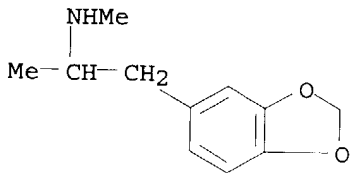
IT 51-64-9 537-46-2, Methamphetamine **4764-17-4**, 3,4-Methylenedioxyamphetamine **42542-10-9**, 3,4-Methylenedioxymethamphetamine
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(monoclonal **antibodies** to amphetamine and related compds.)

IT **4764-17-4**, 3,4-Methylenedioxyamphetamine **42542-10-9**,

3,4-Methylenedioxymethamphetamine
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(monoclonal **antibodies** to amphetamine and related compds.)
RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)



RN 42542-10-9 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, N,α-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1990:71776 HCAPLUS
DOCUMENT NUMBER: 112:71776
TITLE: Enzyme linked immunosorbent assay (ELISA) using monoclonal antibody to detect methamphetamine in urine and hair
AUTHOR(S): Nakahara, Yuji; Ishigami, Akiko; Takeda, Yasushi; Usagawa, Takashi; Uda, Taizo
CORPORATE SOURCE: Natl. Inst. Hyg. Sci., Tokyo, 158, Japan
SOURCE: Eisei Kagaku (1989), 35(5), 333-8
CODEN: ESKGA2; ISSN: 0013-273X
DOCUMENT TYPE: Journal
LANGUAGE: English

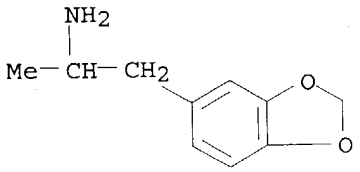
AB The cross reactivity of monoclonal antibody of methamphetamine (I) against ephedrine, methylephedrine, methoxyphenamine, phentermine, norephedrine, N,N-dibenzylenediamine, p-methoxyamphetamine, p-hydroxymethamphetamine, p-methoxymethamphetamine, methylenedioxyamphetamine, labetalol, and other related compds. was 0.1, 1.5, 0.2, 0.4, <0.1, 0.5, 0.2, 1.3, 3.3, 0.9, 2.6, and <1.0%, resp., but that against dimethylamphetamine was 150%. The detection limit of I in urine was 0.2 μg/mL at the 95% confidence limit and the working range 0.3-30 μg/mL. The coeffs. of variation of the assay for I in urine at 1 μg/mL were 5.68% for within-run and 8.26% for between-run. The correlation coefficient between this assay and GC-mass spectrometry method of 48 urine specimens was 0.9934. The assay required 5 μL of specimen in 50 μL of total assay volume, and took about 1 h for 96 specimens. The assay could also be applied to hair anal. to monitor I abuse history.

CC 4-2 (Toxicology)
IT 54-04-6, Mescaline 64-13-1 93-30-1, Methoxyphenamine 103-86-6,

p-Hydroxyamphetamine 122-09-8, Phentermine 140-28-3, Benzathine 299-42-3, Ephedrine 300-62-9, Amphetamine 365-26-4, p-Hydroxyephedrine 370-14-9, p-Hydroxymethamphetamine 492-41-1, Norephedrine 552-79-4, Methylephedrine 771-91-5, p-Hydroxynorephedrine 4075-96-1, Dimethylamphetamine **4764-17-4**, Methylenedioxyamphetamine 15588-95-1, STP 22331-70-0 36894-69-6, Labetalol
RL: BIOL (Biological study)
(methamphetamine cross reactivity with, in detection by monoclonal **antibody**-based ELISA)

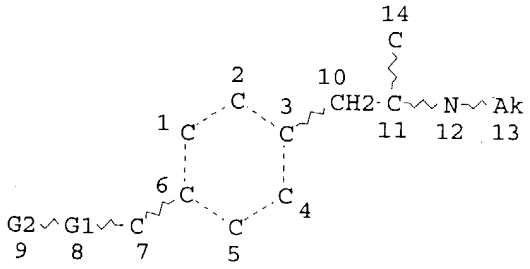
IT **4764-17-4**, Methylenedioxyamphetamine
RL: BIOL (Biological study)
(methamphetamine cross reactivity with, in detection by monoclonal **antibody**-based ELISA)

RN 4764-17-4 HCAPLUS
CN 1,3-Benzodioxole-5-ethanamine, α-methyl- (9CI) (CA INDEX NAME)



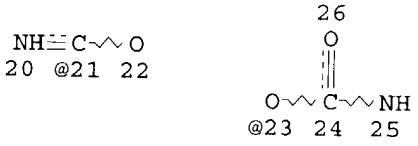
<c>Ceperley 10/087,612<r> July 27,2004

=> d que l6
L1 STR



S @19

Considered 09/14/04 MEC



REP G1=(0-20) A
VAR G2=15/NH/17/19/21/23
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 11
CONNECT IS E1 RC AT 13
CONNECT IS E1 RC AT 18
CONNECT IS X2 RC AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 C AT 13

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE
L3 19 SEA FILE=REGISTRY SSS FUL L1
L4 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L5 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND (?ANTIBOD? OR ?ANTIGEN? OR ?IMMUN? OR ?HAPTEN? OR ?ASSAY? OR ?LABEL? OR ?TRACER? OR ?OVALBUM? OR ?POLYSACC? OR ?LYSINE?)
L6 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR L5

=> d l6 ibib ab hitind hitstr 1-10

L6 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:539953 HCAPLUS
TITLE: Preparation of peptide factor Xa inhibitors as antithrombotics.
INVENTOR(S): Al-Obeidi, Fahad; Lebl, Michal; Ostrem, James A.; Safar, Pavel; Stierandova, Alena; Strop, Peter; Walser, Armin
PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA
SOURCE: U.S., 32 pp., Cont.-in-part of U.S. 5,849,510. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6759384	B1	20040706	US 1998-211715	19981214
EP 1384725	A2	20040128	EP 2003-21617	19950425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
US 5849510	A	19981215	US 1997-947794	19971008

PRIORITY APPLN. INFO.:
US 1994-233054 B2 19940426
US 1995-428404 B1 19950425
US 1997-947794 A2 19971008
EP 1995-917736 A3 19950425

AB The invention provides compds. A1-A2-(A3)m-B [m = 0, 1; A1 = R1-R2-R3; A2 = R4-R5-R6; A3 = R7-R8-R9; R1 = (substituted) 1-20 amino acid residues, R11CO, R11R12X; X = N, CH, NCO; R11, R12 = H, alkyl, acyl, aryl, aralkyl, protecting group; R2 = CR99R100; R99, R100 = H, (substituted) alkyl, aralkyl, heteroaralkyl, heteroaryl; R3 = CO, CH2, CHR99CO, etc.; R4 = CH2, imino; R5 = CR201R202; R201, R202 = H, (substituted) alkyl, aryl, aralkyl; R6 = CO, CH2, CHR99CO; R7 = (substituted) R4; R8 = CR210R211; R210, R211 = H, (substituted) alkyl, alkylaryl, heterocyclyl; R9 = CO, CH2, CHR99CO; B = (substituted) 1-20 amino acid residues, amino, OH, alkoxy, acyloxy, etc.; with provisos] which specifically inhibit factor Xa activity. A compound of the invention is characterized, in part, in that it exhibits a specific inhibition of factor Xa activity with a Ki ≤ 100 μM, preferably ≤ 2 nM, and does not substantially inhibit the activity of other proteases involved in the coagulation cascade. Thus, Ac-Tyr-Chg-Arg-NH2 (Chg = cyclohexylglycyl) inhibited coagulation in human plasma with EC50 = 2.5 μM.

IC ICM A61K038-55
ICS C07K001-00

NCL 514002000; 530384000; 530381000; 530380000; 530420000

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1

IT INDEXING IN PROGRESS

IT 174132-11-7P 174132-12-8P 174132-13-9P 174132-14-0P 174132-15-1P
174132-16-2P 174132-17-3P 174132-18-4P 174132-19-5P 174132-20-8P
174132-21-9P 174132-22-0P 174132-23-1P 174132-24-2P 174132-25-3P
174132-26-4P 174132-27-5P 174132-28-6P 174132-29-7P
174132-93-5P 174132-94-6P 174132-95-7P 174133-06-3P
174133-07-4P 174133-08-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide factor Xa inhibitors as antithrombotics)

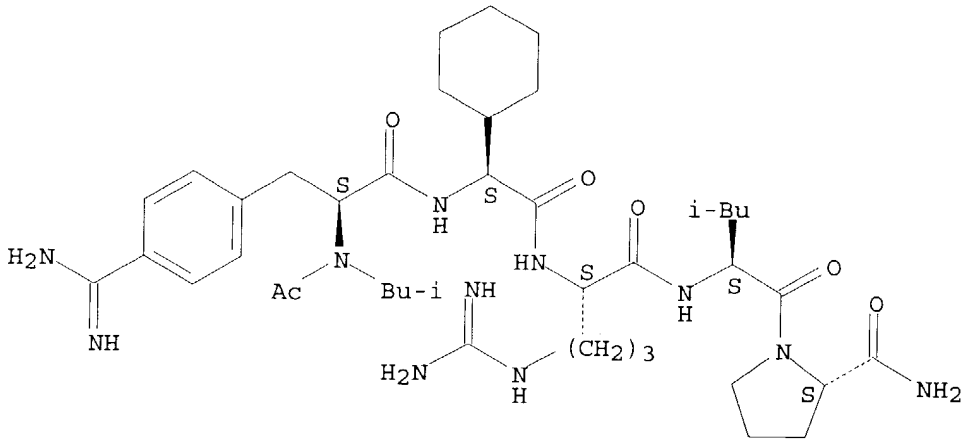
IT **174132-93-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide factor Xa inhibitors as antithrombotics)

RN 174132-93-5 HCAPLUS
CN L-Prolinamide, N-acetyl-4-(aminoiminomethyl)-N-(2-methylpropyl)-L-phenylalanyl-L-2-cyclohexylglycyl-L-arginyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:331676 HCAPLUS
DOCUMENT NUMBER: 140:334030
TITLE: Derivatives, conjugates, and **antibodies** for detecting ecstasy-class analytes
INVENTOR(S): Hui, Raymond A.; Vitone, Stephen; Root, Richard Terry; Baburina, Irina; Jordan, Sheri
PATENT ASSIGNEE(S): Roche Diagnostics Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. Ser. No. 87,612.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004077021	A1	20040422	US 2003-622524	20030718
US 2003170917	A1	20030911	US 2002-87612	20020301
JP 2004123692	A2	20040422	JP 2003-49992	20030226

this applica

PRIORITY APPLN. INFO.: US 2002-87612 A2 20020301
OTHER SOURCE(S): MARPAT 140:334030

AB Compds. including **haptens**, intermediates, and **immunogens** that are useful in the production of **antibodies** specific for the methylenedioxy class of amphetamine derivs. are described. **Antibodies** specific for the methylenedioxy class of amphetamine derivs., reagent kits containing **antibodies** specific for the methylenedioxy class of amphetamine derivs., methods of producing **antibodies** specific for the methylenedioxy class of amphetamine derivs., and methods of detecting analytes including members of the methylenedioxy class of amphetamine derivs. are also described.

IC ICM G01N033-53
NCL 435007100
CC 4-2 (Toxicology)
Section cross-reference(s): 1, 64
ST **immunoassay** ecstasy type drug forensic
IT **Antigens**

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(conjugates; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **Haptens**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **Antibodies** and **Immunoglobulins**
Thyroglobulin
RL: RCT (Reactant); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT Forensic analysis
(drug; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **Immunoassay**
(enzyme-linked **immunosorbent assay**; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT Hemocyanins
RL: RCT (Reactant); RACT (Reactant or reagent)
(keyhole limpet; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **Antibodies** and **Immunoglobulins**
RL: RCT (Reactant); RACT (Reactant or reagent)
(monoclonal; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT Albumins, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(serum; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT 681028-35-3DP, conjugates with keyhole limpet hemocyanin
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(MDMA **immunogen** synthesis; derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT 82801-81-8, 3,4-Methylenedioxy-N-ethylamphetamine 107447-03-0, 1-(3,4-Methylenedioxyphenyl)-2-butanamine 135795-90-3 **590346-21-7**
RL: ANT (Analyte); ANST (Analytical study)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT 42542-10-9, Ecstasy
RL: ANT (Analyte); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **681028-36-4DP**, conjugates with keyhole limpet hemocyanin
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT 56-91-7, 4-Aminomethylbenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT 681028-37-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

<c>Ceperley 10/087,612<r> July 27,2004

(Reactant or reagent)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **590346-20-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

IT **590346-18-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification)

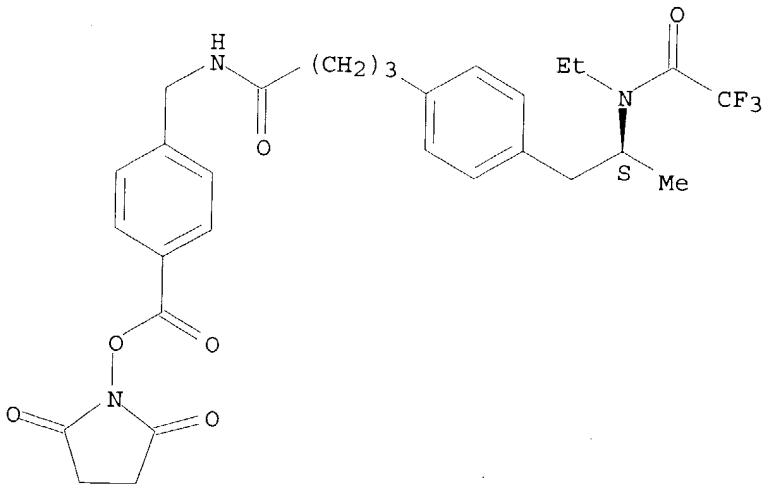
IT 590346-15-9P **590346-19-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and **immunogen** preparation from)

IT **590346-17-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction)

IT **590346-21-7**
RL: ANT (Analyte); ANST (Analytical study)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

RN 590346-21-7 HCAPLUS
CN Benzenebutanamide, N-[[4-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]methyl]-4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



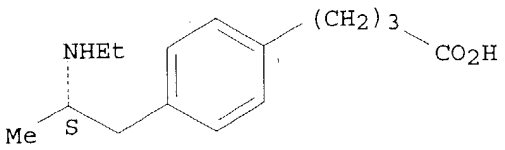
IT **681028-36-4DP**, conjugates with keyhole limpet hemocyanin
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)

RN 681028-36-4 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-(ethylamino)propyl]- (9CI) (CA INDEX NAME)

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

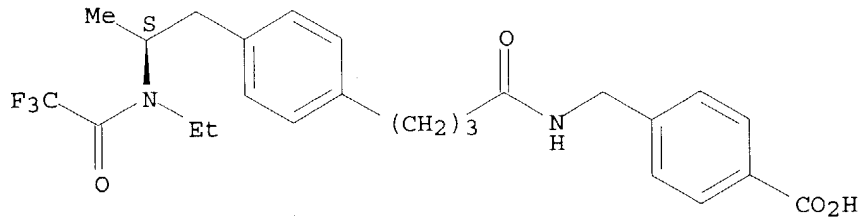
<c>Ceperley 10/087,612<r> July 27,2004

Absolute stereochemistry.



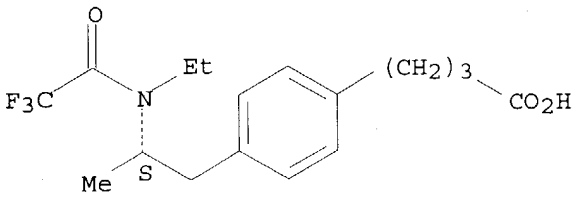
IT **590346-20-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(derivs., conjugates, and **antibodies** for detecting ecstasy-class analytes)
RN 590346-20-6 HCAPLUS
CN Benzoic acid, 4-[[[4-[4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]phenyl]-1-oxobutyl]amino]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **590346-18-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification)
RN 590346-18-2 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

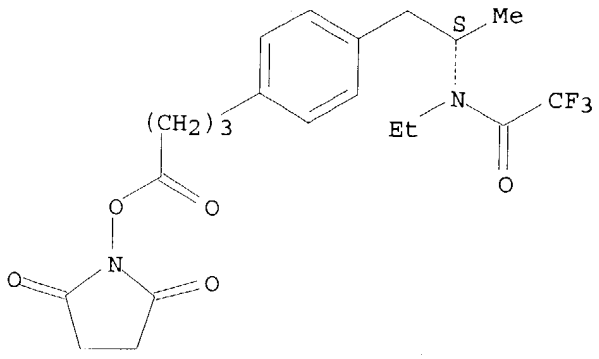


IT **590346-19-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and **immunogen** preparation from)
RN 590346-19-3 HCAPLUS
CN Acetamide, N-[(1S)-2-[4-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]phenyl]-1-methylethyl]-N-ethyl-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

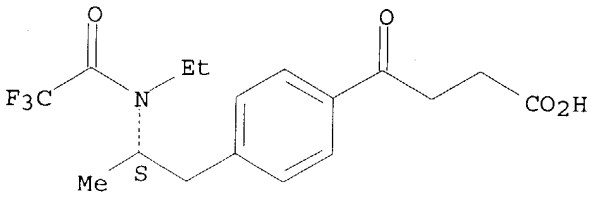
<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



IT **590346-17-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction)
RN 590346-17-1 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]-γ-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:693233 HCAPLUS
DOCUMENT NUMBER: 139:207730
TITLE: **Antibodies** for detecting amphetamine derivatives, compounds useful in **antibody** production, reagent kits, and detection methods for amphetamine derivatives
INVENTOR(S): Hui, Raymond A.
PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany; F. Hoffmann-La Roche A.-G.
SOURCE: Eur. Pat. Appl., 30 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1340981	A2	20030903	EP 2003-3298	20030225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2003175995	A1	20030918	US 2002-87469	20020301
JP 2004002316	A2	20040108	JP 2003-49924	20030226

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

PRIORITY APPLN. INFO.: US 2002-87469 A 20020301
OTHER SOURCE(S): MARPAT 139:207730
AB Compds. including **haptens**, intermediates, and **immunogens** that are useful in the production of **antibodies** specific for the methylenedioxy class of amphetamine derivs. are described. **Antibodies** specific for the methylenedioxy class of amphetamine derivs., reagent kits containing **antibodies** specific for the methylenedioxy class of amphetamine derivs., methods of producing **antibodies** specific for the methylenedioxy class of amphetamine derivs., and methods of detecting analytes including members of the methylenedioxy class of amphetamine derivs. are also described.
IC ICM G01N033-94
ICS C07K016-00; C07D317-58
CC 1-1 (Pharmacology)
Section cross-reference(s): 15, 28
ST amphetamine deriv **immunogen** prepn **immunoassay** **antibody**
IT **Immunoassay**
Test kits
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
IT **Antibodies** and **Immunoglobulins**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
IT Albumins, biological studies
Globulins, biological studies
Hemocyanins
Macromolecular compounds
Peptides, biological studies
Polysaccharides, biological studies
Proteins
Thyroglobulin
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(conjugates; **antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
IT **Immunoassay**
(enzyme-linked **immunosorbent assay**; **antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
IT **Antigens**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**immunogens**; **antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
IT **Antibodies** and **Immunoglobulins**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal; **antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

methods for amphetamine derivs.)

IT Albumins, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(serum, conjugates; **antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT 300-62-9, Amphetamine 300-62-9D, Amphetamine, derivs. 4764-17-4, MDA 42542-10-9, MDMA 42542-10-9D, Ecstasy, derivs. 74698-36-5, MDPA 82801-81-8, MDEA 107447-03-0, BDB 135795-90-3, MBDB
RL: ANT (Analyte); ANST (Analytical study)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT 590346-23-9D, BSA conjugates
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT 590346-15-9DP, carrier protein conjugates **590346-19-3DP**, carrier protein conjugates
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT 51-63-8 56-91-7, 4-(Aminomethyl)benzoic acid 74-96-4, Ethyl bromide 108-30-5, Succinic anhydride, reactions 407-25-0, Trifluoroacetic anhydride 2969-81-5, Ethyl 4-bromobutyrate 6066-82-6, N-Hydroxysuccinimide 590346-12-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT 33817-11-7P 590346-11-5P 590346-13-7P 590346-14-8P 590346-15-9P 590346-16-0P **590346-17-1P 590346-18-2P 590346-19-3P 590346-20-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT **590346-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

IT 51-41-2, Norepinephrine 51-43-4, Adrenaline 51-64-9 51-67-2, Tyramine 90-82-4, Pseudoephedrine 122-09-8, Phentermine 156-34-3 299-42-3, Ephedrine 537-46-2 607-80-7, Sesamin 634-03-7, Phendimetrazine 14838-15-4, Phenylpropanolamine 33817-09-3 66142-89-0 66357-35-5, Ranitidine
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(cross-reactivity; **antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

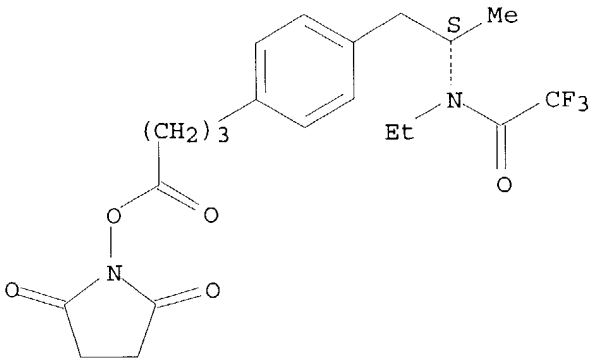
IT **590346-19-3DP**, carrier protein conjugates

<c>Ceperley 10/087,612<r> July 27,2004

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

RN 590346-19-3 HCAPLUS
CN Acetamide, N-[(1S)-2-[4-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]phenyl]-1-methylethyl]-N-ethyl-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

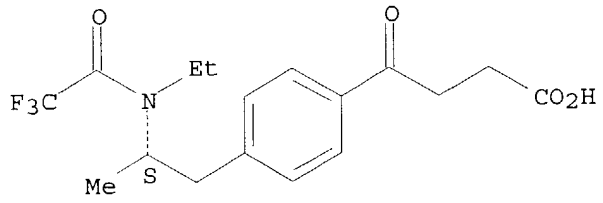
Absolute stereochemistry.



IT **590346-17-1P 590346-18-2P 590346-19-3P**
590346-20-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)

RN 590346-17-1 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]-γ-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

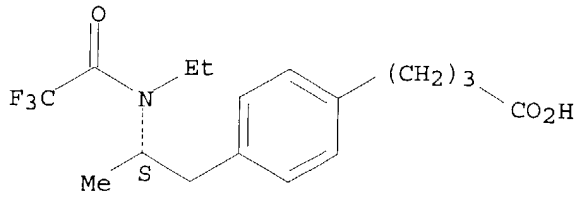


RN 590346-18-2 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

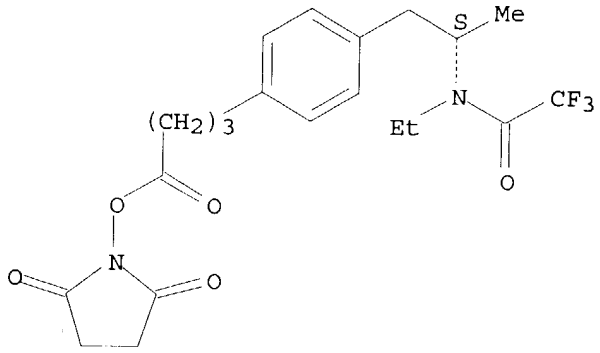
<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



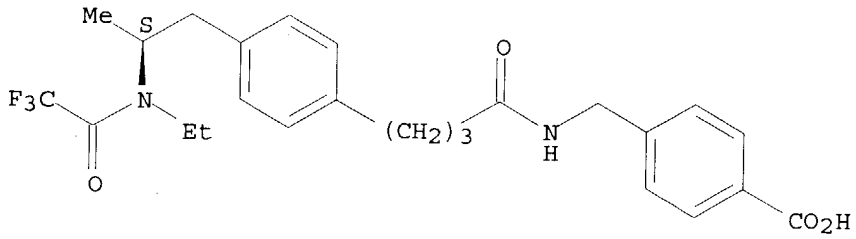
RN 590346-19-3 HCAPLUS
CN Acetamide, N-[(1S)-2-[4-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]phenyl]-1-methylethyl]-N-ethyl-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 590346-20-6 HCAPLUS
CN Benzoic acid, 4-[[[4-[4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]phenyl]-1-oxobutyl]amino]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

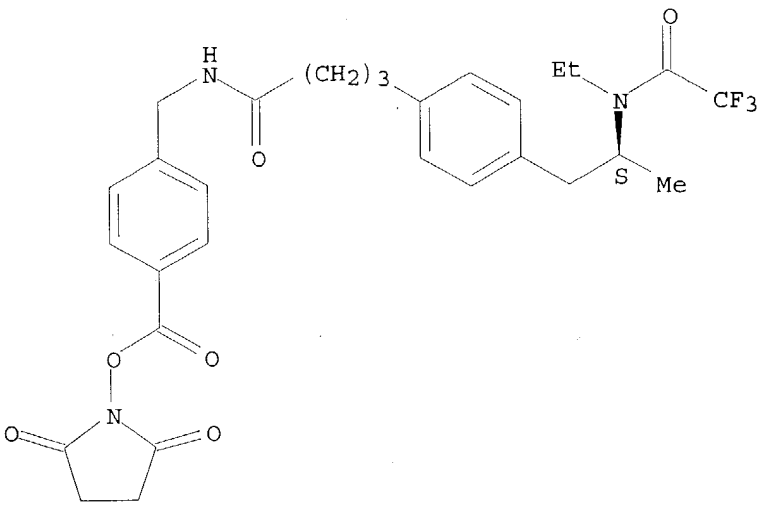


IT **590346-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(**antibodies** for detecting amphetamine derivs., compds. for **antibody** production, reagent kits, and detection methods for amphetamine derivs.)
RN 590346-21-7 HCAPLUS
CN Benzenebutanamide, N-[[4-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]methyl]-4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



L6 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:693232 HCAPLUS
DOCUMENT NUMBER: 139:207729
TITLE: Amphetamine derivatives, **antibodies** to the derivatives, reagent kits, methods of producing the **antibodies**, and methods of detecting the derivatives
INVENTOR(S): Hui, Raymond A.; Root, Richard T.; Vitone, Stephan S.
PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany; F. Hoffmann-La Roche A.-G.
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1340980	A1	20030903	EP 2003-3297	20030225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2003170917	A1	20030911	US 2002-87612	20020301
JP 2004123692	A2	20040422	JP 2003-49992	20030226

PRIORITY APPLN. INFO.: US 2002-87612 A 20020301
OTHER SOURCE(S): MARPAT 139:207729

Hui application

AB Compds. including **haptens**, intermediates, and **immunogens** that are useful in the production of **antibodies** specific for the methylenedioxy class of amphetamine derivs. are described. **Antibodies** specific for the methylenedioxy class of amphetamine derivs., reagent kits containing **antibodies** specific for the methylenedioxy class of amphetamine derivs., methods of producing **antibodies** specific for the methylenedioxy class of amphetamine derivs., and methods of detecting analytes including members of the methylenedioxy class of amphetamine derivs. are also described.

IC ICM G01N033-94
ICS A61K031-135; C07C211-26
CC 1-1 (Pharmacology)

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

Section cross-reference(s): 15, 28
ST amphetamine deriv **immunogen** prepn **immunoassay** **antibody**
IT **Immunoassay**
Test kits
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT **Antibodies** and **Immunoglobulins**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT Albumins, biological studies
Globulins, biological studies
Hemocyanins
Macromolecular compounds
Peptides, biological studies
Polysaccharides, biological studies
Proteins
Thyroglobulin
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(conjugates; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT **Immunoassay**
(enzyme-linked **immunosorbent assay**; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT **Antigens**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**immunogens**; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT **Antibodies** and **Immunoglobulins**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT Albumins, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(serum, conjugates; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT 300-62-9, Amphetamine 300-62-9D, Amphetamine, derivs. 42542-10-9, Ecstasy 42542-10-9D, Ecstasy, derivs. 82801-81-8, MDEA
RL: ANT (Analyte); ANST (Analytical study)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT 590346-44-4D, BSA conjugates 590346-45-5D, BSA conjugates
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
IT 590346-15-9DP, carrier protein conjugates **590346-19-3DP**, carrier protein conjugates

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

IT 51-63-8 56-91-7, 4-(Aminomethyl)benzoic acid 74-96-4, Ethyl bromide 108-30-5, Succinic anhydride, reactions 407-25-0, Trifluoroacetic anhydride 2969-81-5, Ethyl 4-bromobutyrate 6066-82-6, N-Hydroxysuccinimide 590346-12-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

IT 33817-11-7P 590346-11-5P 590346-13-7P 590346-14-8P 590346-15-9P 590346-16-0P **590346-17-1P 590346-18-2P** **590346-19-3P 590346-20-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

IT **590346-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

IT 51-41-2, Norepinephrine 51-43-4, Adrenaline 51-64-9 51-67-2, Tyramine 90-82-4, Pseudoephedrine 122-09-8, Phentermine 156-34-3 299-42-3, Ephedrine 607-80-7, Sesamin 634-03-7, Phendimetrazine 14838-15-4, Phenylpropanolamine 33817-09-3 66142-89-0 66357-35-5, Ranitidine 74698-36-5, MDPA 107447-03-0, BDB 135795-90-3, MBDB
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(cross-reactivity; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

IT 4764-17-4P, MDA
RL: ANT (Analyte); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(cross-reactivity; amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

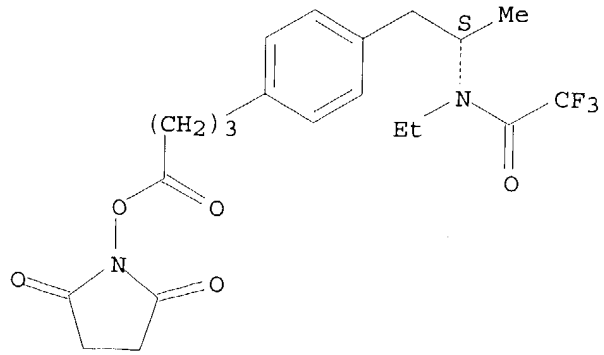
IT **590346-19-3DP**, carrier protein conjugates
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)

RN 590346-19-3 HCAPLUS

CN Acetamide, N-[(1S)-2-[4-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]phenyl]-1-methylethyl]-N-ethyl-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

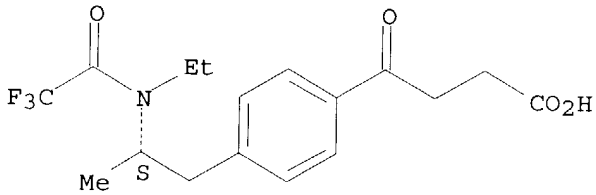
Absolute stereochemistry.

<c>Ceperley 10/087,612<r> July 27,2004



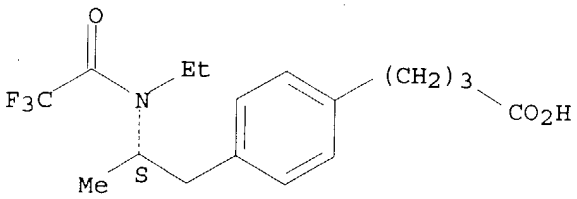
IT **590346-17-1P 590346-18-2P 590346-19-3P**
590346-20-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
RN 590346-17-1 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]-γ-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 590346-18-2 HCAPLUS
CN Benzenebutanoic acid, 4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

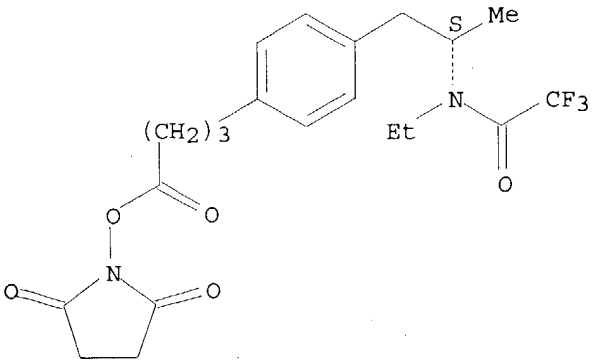


RN 590346-19-3 HCAPLUS
CN Acetamide, N-[(1S)-2-[4-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]phenyl]-1-methylethyl]-N-ethyl-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

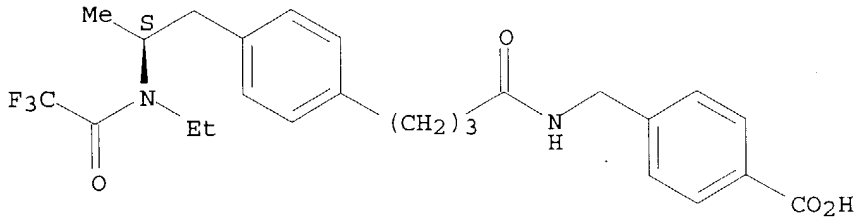
<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



RN 590346-20-6 HCAPLUS
CN Benzoic acid, 4-[[[4-[4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]phenyl]-1-oxobutyl]amino]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

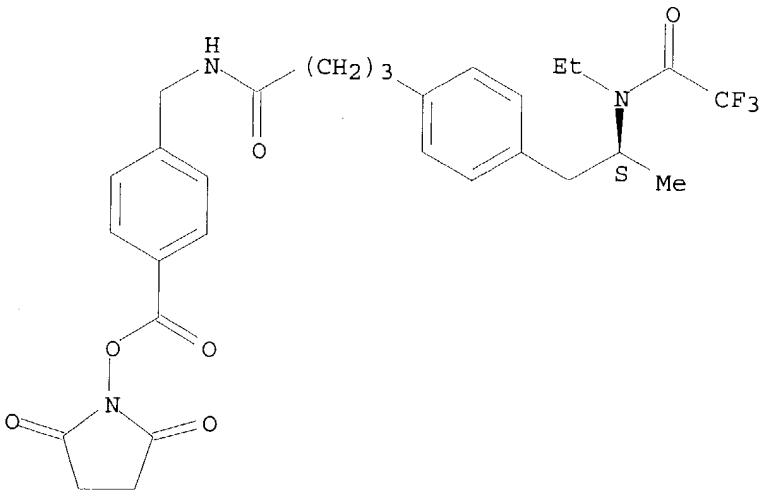


IT **590346-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(amphetamine derivs., anti-derivative **antibodies**, reagent kits, **antibody** production, and derivative detection methods)
RN 590346-21-7 HCAPLUS
CN Benzenebutanamide, N-[[4-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]methyl]-4-[(2S)-2-[ethyl(trifluoroacetyl)amino]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:868427 HCAPLUS
DOCUMENT NUMBER: 136:6016
TITLE: Preparation of aminoalkyllactams as muscarinic receptor antagonists
INVENTOR(S): Dvorak, Charles Alois; Fisher, Lawrence Emerson; Green, Keena Lynn; Harris, Ralph New, III; Maag, Hans; Prince, Anthony; Repke, David Bruce; Stabler, Russell Stephen
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.
SOURCE: PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001090081	A1	20011129	WO 2001-EP5584	20010516
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CU, CZ, DE, DK, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1289965	A1	20030312	EP 2001-980030	20010516
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001011061	A	20030415	BR 2001-11061	20010516
JP 2003534330	T2	20031118	JP 2001-586270	20010516
NZ 522411	A	20040528	NZ 2001-522411	20010516
US 2002004501	A1	20020110	US 2001-862286	20010522

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

US 6667301	B2	20031223			
US 2003109524	A1	20030612	US 2002-289055		20021106
US 6645958	B2	20031111			
NO 2002005640	A	20030122	NO 2002-5640		20021122
US 2004034018	A1	20040219	US 2003-632734		20030801
US 2004087581	A1	20040506	US 2003-685124		20031014
PRIORITY APPLN. INFO.:			US 2000-207483P	P	20000525
			US 2001-267579P	P	20010209
			US 2001-267617P	P	20010209
			WO 2001-EP5584	W	20010516
			US 2001-862286	A3	20010522
			US 2001-862522	A3	20010522
			US 2002-289055	A3	20021106

OTHER SOURCE(S): MARPAT 136:6016

AB Preparation of aminoalkyllactams (I) (one of X, Y or Z = independently -S-,-O-, CH2- or >N-R6, the others are -CH2-; m = 0-3; n = 1-6; R4 = alkyl; R5 = alkyl, alkenyl, alkynyl or cycloalkyl; and R1, R2, and R3 = H or specified substituents). Thus, I (R1 = 4-MeO; R2, R3 = H; R4 = Me; R5 = Et; n = 1; m = 0; X, Y, Z = CH2) (II) is prepared by reaction of (2-oxo-pyrrolidinyl)acetaldehyde with [2-(4-methoxyphenyl)-1-methyethyl]ethylamine and sodium triacetoxyborohydride in 1,2-dichloroethane. II shows pKi of 7.32, 6.95 and 5.36 in muscarinic (M2, M3, M5) inhibitory activity against hamster ovary cells. I are generally muscarinic M2/M3 receptor antagonists and formulations are given for treating diseases associated with smooth muscle disorders.

IC ICM C07D241-08
ICS C07D223-10; C07D267-10; C07D243-08; C07D207-27; C07D211-76; C07D225-02; C07D265-10; C07D267-22; C07D279-06; C07D239-10; C07D243-04; C07D405-12; C07D401-12; C07D409-12; C07D409-06; C07D411-12; C07D417-12; C07D413-06; C07D405-06

CC 28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63

IT 376579-63-4P 376579-65-6P 376579-67-8P 376579-69-0P 376579-71-4P
376579-73-6P 376579-75-8P 376579-77-0P 376579-79-2P 376579-81-6P
376579-83-8P 376579-85-0P 376579-87-2P 376579-89-4P 376579-91-8P
376579-92-9P 376579-93-0P 376579-94-1P 376579-95-2P 376579-96-3P
376579-97-4P 376579-99-6P 376580-01-7P 376580-02-8P 376580-03-9P
376580-04-0P 376580-05-1P 376580-06-2P 376580-07-3P 376580-08-4P
376580-09-5P 376580-10-8P 376580-11-9P 376580-12-0P 376580-13-1P
376580-14-2P 376580-15-3P 376580-16-4P 376580-17-5P 376580-18-6P
376580-19-7P 376580-20-0P **376580-21-1P** 376580-22-2P
376580-23-3P 376580-24-4P 376580-25-5P 376580-26-6P 376580-27-7P
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376580-53-9P 376580-55-1P 376580-57-3P 376580-59-5P 376580-61-9P
376580-63-1P 376580-65-3P 376580-66-4P 376580-67-5P 376580-68-6P
376580-69-7P 376580-70-0P 376580-71-1P 376580-72-2P 376580-73-3P
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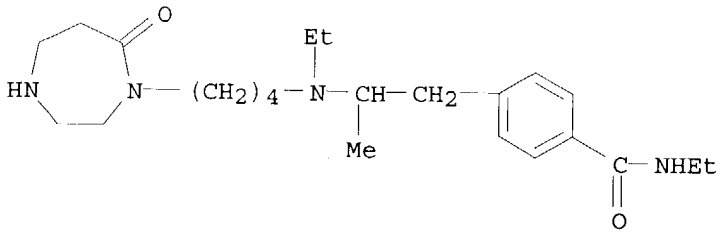
376580-89-1P 376580-90-4P 376580-91-5P 376580-92-6P 376580-93-7P
376580-95-9P 376591-75-2P 376591-80-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminoalkyllactams as muscarinic receptor antagonists)

IT **376580-21-1P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminoalkyllactams as muscarinic receptor antagonists)
RN 376580-21-1 HCAPLUS
CN Benzamide, N-ethyl-4-[2-[ethyl[4-(hexahydro-7-oxo-1H-1,4-diazepin-1-yl)butyl]amino]propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

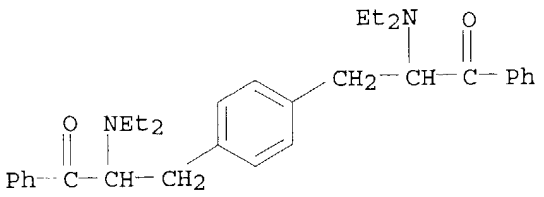


● HCl

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:263172 HCAPLUS
DOCUMENT NUMBER: 126:305340
TITLE: Study in amines and ammonium compounds. CCXXVI. Stevens rearrangement of bis-ammonium salts containing a common p-xylylenyl group
AUTHOR(S): Karapetyan, V. E.; Kocharyan, S. T.; Babayan, A. T.
CORPORATE SOURCE: Inst. Org. Khim., Nats. Akad. Nauk Respub. Arm., Yerevan, 375091, Armenia
SOURCE: Zhurnal Organicheskoi Khimii (1996), 32(8), 1190-1193
CODEN: ZORKAE; ISSN: 0514-7492
PUBLISHER: Nauka
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Treatment of 1,4-(R1COCH2N+R22CH2)2C6H4.2Br- [R1 = R2 = Me; R1 = Me, R22 = (CH2)5; R1 = Ph, R2 = Me; R1 = Ph, R2 = Et; R1 = Ph, R22 = (CH2)5 (1-5, resp.)] in with KOH afforded Stevens rearrangement product 1,4-[R1COCH(NR22)CH2]2C6H4 + cleavage product 1,4-(R22NCH2)2C6H4. Water solvent favored rearrangement for 3-5, whereas rearrangement of 2 failed in water but succeeded in benzene.
CC 22-6 (Physical Organic Chemistry)
IT 19851-38-8P 36997-13-4P 40828-00-0P 189205-87-6P 189205-88-7P 189205-89-8P **189205-90-1P** 189205-91-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Stevens rearrangement of bis-ammonium salts containing a common p-xylylenyl group)
IT **189205-90-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(Stevens rearrangement of bis-ammonium salts containing a common p-xylylenyl group)
RN 189205-90-1 HCAPLUS
CN 1-Propanone, 3,3'-(1,4-phenylene)bis[2-(diethylamino)-1-phenyl- (9CI) (CA INDEX NAME)

<c>Ceperley 10/087,612<r> July 27,2004



L6 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:998406 HCAPLUS
DOCUMENT NUMBER: 124:203098
TITLE: Preparation of peptide factor Xa inhibitors as antithrombotics.
INVENTOR(S): Al-Obeidi, Fahad; Lebl, Michal; Ostrem, James A.; Safar, Pavel; Stierandova, Alena; Strop, Peter; Walser, Armin
PATENT ASSIGNEE(S): Selectide Corp., USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9529189	A1	19951102	WO 1995-US5268	19950425
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2186497	AA	19951102	CA 1995-2186497	19950425
AU 9523683	A1	19951116	AU 1995-23683	19950425
AU 707653	B2	19990715		
ZA 9503361	A	19960112	ZA 1995-3361	19950425
EP 758341	A1	19970219	EP 1995-917736	19950425
EP 758341	B1	20040324		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1147261	A	19970409	CN 1995-192811	19950425
HU 76346	A2	19970828	HU 1996-2954	19950425
JP 10503477	T2	19980331	JP 1995-527853	19950425
RU 2152954	C1	20000720	RU 1996-122647	19950425
EE 3973	B1	20030217	EE 1996-146	19950425
EP 1384725	A2	20040128	EP 2003-21617	19950425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
IL 113505	A1	19991231	IL 1995-113505	19950426
TW 409129	B	20001021	TW 1995-84104681	19950511
FI 9604317	A	19961025	FI 1996-4317	19961025
NO 9604553	A	19961227	NO 1996-4553	19961025
LT 4218	B	19970925	LT 1996-151	19961025
LV 11740	B	19971220	LV 1996-410	19961115

PRIORITY APPLN. INFO.:

US 1994-233054	A	19940426
EP 1995-917736	A3	19950425
WO 1995-US5268	W	19950425

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

OTHER SOURCE(S): MARPAT 124:203098

AB A1-A2-(A3)m-B [m = 0, 1; A1 = R1-R2-R3; A2 = R4-R5-R6; A3 = R7-R8-R9; R1 = (substituted) 1-20 amino acid residues, R11CO, R11R12X; X = N, CH, NCO; R11, R12 = H, alkyl, acyl, aryl, aralkyl, protecting group; R2 = CR99R100; R99, R100 = H, (substituted) alkyl, aralkyl, heteroaralkyl, heteroaryl; R3 = CO, CH2, CHR99CO, etc.; R4 = CH2, imino; R5 = CR201R202; R201, R202 = H, (substituted) alkyl, aryl, aralkyl; R6 = CO, CH2, CHR99CO; R7 = (substituted) R4; R8 = CR210R211; R210, R211 = H, (substituted) alkyl, alkylaryl, heterocyclyl; R9 = CO, CH2, CHR99CO; B = (substituted) 1-20 amino acid residues, amino, OH, alkoxy, acyloxy, etc.; with provisos], were prepared Thus, Ac-Tyr-Chg-Arg-NH2 (Chg = cyclohexylglycyl) inhibited coagulation in human plasma with EC50 = 2.5 μM.

IC ICM C07K005-08
ICS C07K005-10; C07K007-02; C07K007-04; A61K038-06; A61K038-08

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1

IT 174131-80-7P 174131-81-8P 174131-82-9P 174131-83-0P 174131-84-1P
174131-85-2P 174131-86-3P 174131-87-4P 174131-88-5P 174131-89-6P
174131-90-9P 174131-91-0P 174131-92-1P 174131-93-2P 174131-94-3P
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174132-90-2P 174132-91-3P 174132-92-4P **174132-93-5P**
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174132-99-1P 174133-00-7P 174133-01-8P 174133-02-9P 174133-03-0P
174133-04-1P 174133-05-2P 174133-06-3P 174133-07-4P 174133-08-5P
174133-09-6P 174133-10-9P 174133-11-0P 174133-12-1P 174133-13-2P
174133-14-3P 174133-15-4P 174133-16-5P 174289-72-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide factor Xa inhibitors as antithrombotics)

IT **174132-93-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide factor Xa inhibitors as antithrombotics)

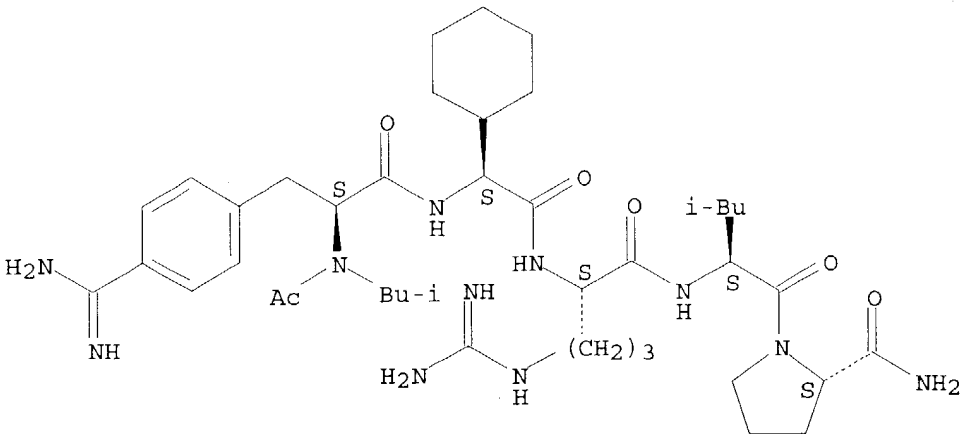
RN 174132-93-5 HCAPLUS

CN L-Prolinamide, N-acetyl-4-(aminoiminomethyl)-N-(2-methylpropyl)-L-phenylalanyl-L-2-cyclohexylglycyl-L-arginyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



L6 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:438244 HCAPLUS
DOCUMENT NUMBER: 109:38244
TITLE: Preparation and formulation of N-[(arylsulfonyl)aminoacyl]-p-amidinophenylalaninamides as drugs
INVENTOR(S): Bernat, Andre; Delebassee, Denis; Frehel, Daniel; Maffrand, Jean Pierre; Vallee, Eric
PATENT ASSIGNEE(S): SANOFI, Fr.
SOURCE: Fr. Demande, 32 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2593812	A1	19870807	FR 1986-1398	19860124
FR 2593812	B1	19880826		
EP 236163	A1	19870909	EP 1987-400149	19870122
EP 236163	B1	19901003		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 57179	E	19901015	AT 1987-400149	19870122
CA 1307076	A1	19920901	CA 1987-527938	19870122
US 4977168	A	19901211	US 1987-6152	19870123
JP 62228050	A2	19871006	JP 1987-15046	19870124
PRIORITY APPLN. INFO.:			FR 1986-1398	19860124
			FR 1986-1400	19860124
			EP 1987-400149	19870122

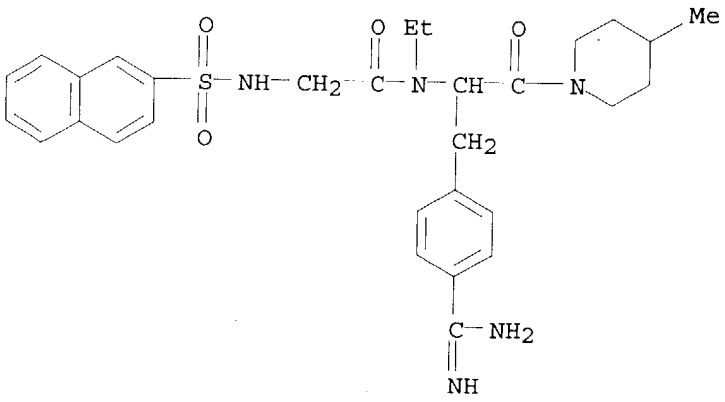
OTHER SOURCE(S): CASREACT 109:38244
AB The title compds. [I; R1 = H, alkyl, HOCH2, etc.; R2 = alkyl, alkenyl, alkynyl, etc.; R3, R4 = alkyl, alkenyl, alkynyl; NR3R4 may form a ring; R5 = C(:NH)NH2] (II) and their pharmaceutically acceptable salts, useful as drugs, are prepared I (Ar = 2-naphthyl, R1 = H, R2 = Me, NR3R4 = piperidino, R5 = cyano) (preparation shown) was treated with HCl-saturated MeOH at
0° for 20 h to give I [Ar = 2-naphthyl, R1 = H, R2 = Me, NR3R4 = piperidino, R5 = C(:NH)OMe], which was refluxed with methanolic ammonia to at 0-5° for 3 h to give, after treatment with HCl, II [Ar =

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

2-naphthyl, R1 = H, R2 = Me, NR3R4 = piperidino].HCl (III). III increased the coagulation time of citrated plasma in the presence of thrombin by 1529% vs. 233% for heparin. Sugar-coated tablets were prepared containing 0.050 g III, lactose, polyvinylpyrrolidone, Mg stearate, lac gum, talc, CaCO3, silica, titanium oxide, arabic gum, white wax, and carnauba wax.

IC ICM C07D295-10
ICS C07D211-16; C07D401-12; A61K031-47; A61K031-445
ICI C07D401-12, C07D215-36, C07D211-16
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 63
IT 115132-74-6P 115241-84-4P 115242-07-4P **115242-08-5P**
115242-09-6P **115242-10-9P 115242-11-0P** 115242-12-1P
115242-14-3P **115242-15-4P** 115242-16-5P 115242-17-6P
115242-18-7P 115242-19-8P 115242-20-1P 115242-21-2P 115244-33-2P
115259-37-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anticoagulant)
IT **115242-08-5P 115242-10-9P 115242-11-0P**
115242-15-4P 115259-37-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anticoagulant)
RN 115242-08-5 HCAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-(4-methyl-1-piperidinyl)-2-oxoethyl]-N-ethyl-2-[(2-naphthalenylsulfonyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)

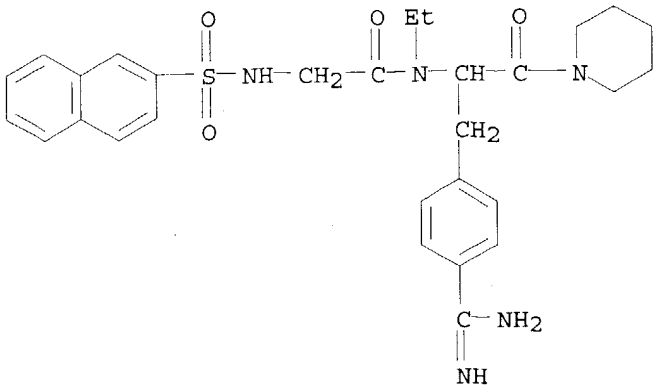


● HCl

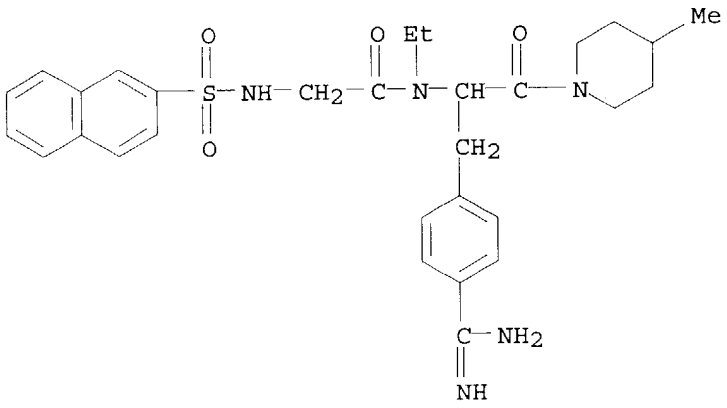
RN 115242-10-9 HCAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-N-ethyl-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



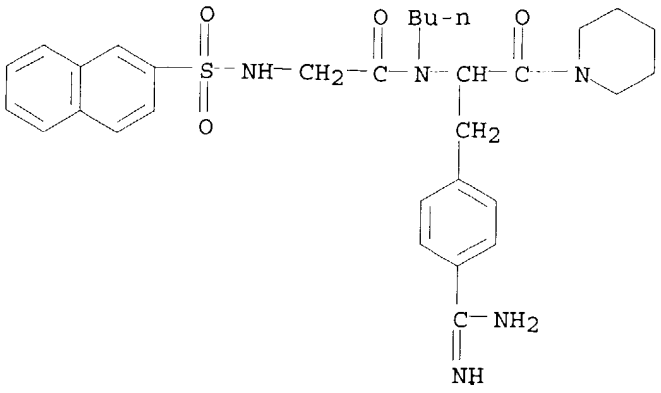
RN 115242-11-0 HCAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-(4-methyl-1-piperidinyl)-2-oxoethyl]-N-ethyl-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)



RN 115242-15-4 HCAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-N-butyl-2-[(2-naphthalenylsulfonyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)

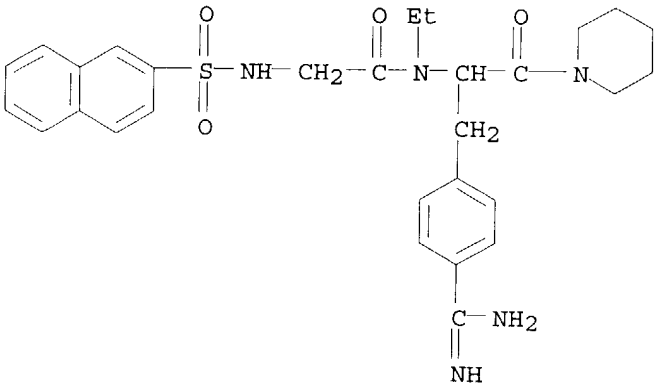
<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004



● HCl

RN 115259-37-5 HCAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-N-ethyl-2-[(2-naphthalenylsulfonyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L6 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:100184 HCAPLUS
DOCUMENT NUMBER: 72:100184
TITLE: New p-bis(2-aminopropyl)benzene derivatives
AUTHOR(S): Bobranski, Boguslaw; Konieczny, Mieczyslaw
CORPORATE SOURCE: Inst. Immunol. Exp. Ther., Polska Acad. Nauk, Wroclaw, Pol.
SOURCE: Archivum Immunologiae et Therapiae Experimentalis (1970), 18(1), 143-9
CODEN: AITEAT; ISSN: 0004-069X
DOCUMENT TYPE: Journal
LANGUAGE: English

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

AB p-[MeCH(NHR1)CH2]2C6H4 (I) (R1 = H, Me, CH2CH2OH, iso-Pr, or CH2Ph), having hypotensive activity, were prepared by hydrogenating p-R22C6H4 (II) (R2 = CH2Ac) (III) in the presence of Pd/C catalyst and NH3 or the corresponding amine. Thus, a mixture containing dry benzene 125, paraformaldehyde 125, anhydrous ZnCl2 50, and anhydrous H3PO4 50 g was treated dropwise during 2.5 hr with 250 g SOCl2 and stirred 2 hr at 45° to give, after standing overnight, 70% II (R2 = CH2Cl), which was hydrolyzed with K2CO3. II (R2 = CH2OH) was oxidized to 83% II (R2 = CHO) (IV) by HNO3. Boiling 13.4 g IV, 22.5 g EtNO2, and 1 ml amylamine 8 hr gave 74% II [R2 = CH:C(Me)NO2] (V), m. 120°. A mixture of 1.24 g V, 5 ml H2O, 5 ml EtOH, 10 mg FeCl3, and 4 g Fe powder was heated to 90° and 6.5 ml 10% HCl added during 4 hr to give 0.67 g III. Reduction of V with LiAlH4 in Et2O and tetrahydrofuran gave only 20% I (R1 = H). III (1.9 g) dissolved in 10 ml absolute EtOH and 0.02 mole of the appropriate amine was hydrogenated with 0.4 g 5% Pd/C catalyst to give the following I (R1, reaction temperature, H pressure in atmospheric, % yield, and m.p. given): H, 25°, 30, 70, 350°; Me, 35°, 50, 38, 288°; Me, 35°, 135, 17, 220°; CH2CH2OH, 35°, 100, 38, 262°; CH2CH2OH, 35°, 100, 15, 180°; iso-Pr, 40°, 130, 37, 329°; iso-Pr, 40°, 130, 57, 293°; CH2Ph, 25°, 80, 82, 301°. The latter compound has antihistaminic and antibradykinin activity (J. Giedanowski, et al., 1969).

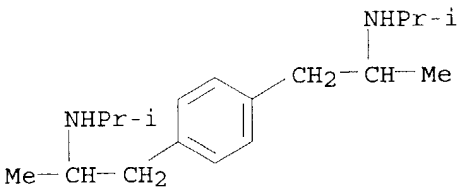
CC 25 (Noncondensed Aromatic Compounds)

IT 22593-80-2 22631-86-3 **24983-74-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoisomers)

IT **24983-74-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoisomers)

RN 24983-74-2 HCAPLUS

CN p-Benzenebis(ethylamine), N,N'-diisopropyl-α,α'-dimethyl-, dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

L6 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1969:479460 HCAPLUS

DOCUMENT NUMBER: 71:79460

TITLE: Pharmacologic properties of substituted derivatives of bis-(aminopropyl)-benzene

AUTHOR(S): Gieldanowski, Jerzy; Pelczarska, Alicja; Patkowski, Janusz

CORPORATE SOURCE: Dep. Immunopharmacol., Polska Akad. Nauk, Wroclaw, Pol.

SOURCE: Archivum Immunologiae et Therapiae Experimentalis

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

<c>Ceperley 10/087,612<r> July 27,2004

(1969), 17(4), 536-46
CODEN: AITEAT; ISSN: 0004-069X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB p-Bis-(2-methylaminopropyl)-benzene-2HCl, α-p-bis-(2-isopropylaminopropyl)benzene-2HCl, b - p - bis - (2-isopropylaminopropyl)benzene-2HCl, p - bis - (2-ethanolaminopropyl)benzene-2HCl, and p-bis-(2-benzylaminopropyl)benzene-2HCl were 50% toxic to mice at 150, 200, 150, 50, and 150 mg./kg. i.p. and 13, 30, 24, 25, and 45 mg./kg. i.v. None of the compds. produced local irritation when injected into the conjunctival sac or s.c. on the auricula in rabbits. I.v. administration of these compds. to rabbits and cats reduced arterial blood pressure due to impaired conduction in the myocardium and dilation of peripheral blood vessels. Hypotensive doses depressed respiration. The compds. had no effect on bronchial, intestinal, or gastric muscles. p-Bis-(2-benzylaminopropyl)benzene-2HCl antagonized the effects of histamine and bradykinin on rat skin and bradykinin on isolated rat uterus.

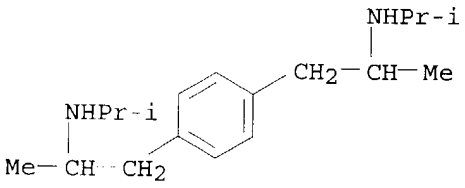
CC 15 (Pharmacodynamics)

IT **24983-74-2**
RL: BIOL (Biological study)
(pharmacology of stereoisomers)

IT **24983-74-2**
RL: BIOL (Biological study)
(pharmacology of stereoisomers)

RN 24983-74-2 HCAPLUS

CN p-Benzenebis(ethylamine), N,N'-diisopropyl-α,α'-dimethyl-, dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

<c>Searched by Paul Schulwitz 571-272-2527 <r><p>

Considered
09/14/04
MEC

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=> dup rem l31 l34 l37 l38
FILE 'MEDLINE' ENTERED AT 16:03:56 ON 27 JUL 2004

FILE 'EMBASE' ENTERED AT 16:03:56 ON 27 JUL 2004
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FILE 'WPIX' ENTERED AT 16:03:56 ON 27 JUL 2004
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PROCESSING COMPLETED FOR L31
PROCESSING COMPLETED FOR L34
PROCESSING COMPLETED FOR L37
PROCESSING COMPLETED FOR L38
L39           51 DUP REM L31 L34 L37 L38 (21 DUPLICATES REMOVED)
                 ANSWERS '1-17' FROM FILE MEDLINE
                 ANSWERS '18-42' FROM FILE EMBASE
                 ANSWERS '43-49' FROM FILE BIOSIS
                 ANSWERS '50-51' FROM FILE WPIX

=> d que l39
L7             2 SEA FILE=REGISTRY ABB=ON  PLU=ON  MDEA/CN
L14            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  3,4-METHYLENEDIOXYAMPHETAMINE
                 /CN
L15            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  ECSTASY/CN
L16            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  BDB/CN
L17            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L16 AND "3,4"
L18            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  MBDB/CN
L19            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  MDPA/CN
L22            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L19 AND OCOC2/ESS
L23            7 SEA FILE=REGISTRY ABB=ON  PLU=ON  L14 OR L15 OR L7 OR L18 OR
                 L17 OR L22
L29           14 SEA FILE=MEDLINE ABB=ON  PLU=ON  L23 AND ?ANTIBOD?
L30            3 SEA FILE=MEDLINE ABB=ON  PLU=ON  (MDEA OR EVE)(5A)?ANTIBOD?
L31           17 SEA FILE=MEDLINE ABB=ON  PLU=ON  L30 OR L29
L32            5 SEA FILE=EMBASE ABB=ON  PLU=ON  (MDEA OR EVE)(5A)?ANTIBOD?
L33           29 SEA FILE=EMBASE ABB=ON  PLU=ON  L23 AND ?ANTIBOD?
L34           34 SEA FILE=EMBASE ABB=ON  PLU=ON  L32 OR L33
L35           13 SEA FILE=BIOSIS ABB=ON  PLU=ON  L23 AND ?ANTIBOD?
L36            6 SEA FILE=BIOSIS ABB=ON  PLU=ON  (MDEA OR EVE)(5A)?ANTIBOD?
L37           19 SEA FILE=BIOSIS ABB=ON  PLU=ON  L35 OR L36
L38            2 SEA FILE=WPIX ABB=ON  PLU=ON  (MDEA OR EVE)(5A)?ANTIBOD?
L39           51 DUP REM L31 L34 L37 L38 (21 DUPLICATES REMOVED)


=> d l39 bib ab hitind 1-51

L39  ANSWER 1 OF 51     MEDLINE on STN                    DUPLICATE 1
AN   2003154929     MEDLINE
DN   PubMed ID: 12672000
TI   Altered gene expression in frontal cortex and midbrain of
     3,4-methylenedioxymethamphetamine (MDMA) treated mice: differential
     regulation of GABA transporter subtypes.
AU   Peng Weiping; Simantov Rabi
CS   Department of Molecular Genetics, Weizmann Institute of Science, Rehovot,
     Israel.
SO   Journal of neuroscience research, (2003 Apr 15) 72 (2) 250-8.
```

Journal code: 7600111. ISSN: 0360-4012.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200306
ED Entered STN: 20030403
Last Updated on STN: 20030613
Entered Medline: 20030612

AB Changes in gene expression were examined in the brain of mice treated with a drug of abuse, 3,4-methylenedioxymethamphetamine (MDMA, also called Ecstasy). Frontal cortex and midbrain mRNA, analyzed by differential display polymerase chain reaction (DD-PCR) method, showed an altered expression of several cDNAs, 11 of which were isolated, cloned and sequenced. The sequence of one MDMA-induced mRNA corresponds (99.3%) to the mouse gamma-amino butyric acid (GABA) transporter 1 (mGAT1). The established involvement of GABA neurotransmission in the activity of several abused drugs prompted us to focus herein on MDMA effect on the GABA transporter gene family. Semi-quantitative PCR analysis with primers selective to the reported mGAT1 sequence confirmed that MDMA treatment increased mGAT1 expression. Time-course study of the expression of the three GABA transporter subtypes showed that MDMA induced a differential temporal activation of mGAT1 and mGAT4, but had no effect on mGAT2. Quantitative real-time PCR further proved the increased expression of mGAT1 and mGAT4 upon MDMA treatment. Western immunoblotting with anti-GAT1 **antibodies** showed that MDMA also increased GAT1 protein levels, suggesting that neurotransmission of GABA was altered. MDMA effect was also verified in serotonin transporter knockout (-/-) mice that are insensitive behaviorally to MDMA; the drug did not increase GAT1 protein level in these mutants. In mice, tiagabine and NO-711, inhibitors of GABA transporters, restrained MDMA-induced acute toxicity and death. These results should facilitate novel approaches to prevent deleterious effects, including fatality, induced by MDMA and similar abused psychostimulants.

CT Check Tags: Male; Support, Non-U.S. Gov't
Animals
Carrier Proteins: CL, classification
*Carrier Proteins: DE, drug effects
Carrier Proteins: GE, genetics
Cloning, Molecular
*Frontal Lobe: DE, drug effects
*Gene Expression Regulation: DE, drug effects
Membrane Proteins: CL, classification
*Membrane Proteins: DE, drug effects
Membrane Proteins: GE, genetics
*Mesencephalon: DE, drug effects
Mice
Mice, Knockout: ME, metabolism
*N-Methyl-3,4-methylenedioxyamphetamine: PD, pharmacology
N-Methyl-3,4-methylenedioxyamphetamine: TO, toxicity
Nerve Tissue Proteins: DE, drug effects
Nipecotic Acids: PD, pharmacology
Oximes: PD, pharmacology
Protein Isoforms: DE, drug effects
RNA, Messenger: DE, drug effects
Reverse Transcriptase Polymerase Chain Reaction
Serotonin: GE, genetics
Serotonin: ME, metabolism

gamma-Aminobutyric Acid: DE, drug effects
RN 115103-54-3 (tiagabine); 145645-62-1 (NNC 711); **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**; 50-67-9 (Serotonin); 56-12-2 (gamma-Aminobutyric Acid)
CN 0 (Carrier Proteins); 0 (GABA modulin); 0 (Membrane Proteins); 0 (Nerve Tissue Proteins); 0 (Nipecotic Acids); 0 (Oximes); 0 (Protein Isoforms); 0 (RNA, Messenger)

L39 ANSWER 2 OF 51 MEDLINE on STN DUPLICATE 2
AN 2003080026 MEDLINE
DN PubMed ID: 12592588
TI Immunohistochemical demonstration of the amphetamine derivatives 3,4-methylenedioxymethamphetamine (MDMA) and 3,4-methylenedioxyamphetamine (MDA) in human post-mortem brain tissues and the pituitary gland.
AU De Letter Els A; Espeel Marc F A; Craeymeersch Marijke E C; Lambert Willy E; Clauwaert Karine M; Dams Riet; Mortier Kjell A; Piette Michel H A
CS Ghent University, Department of Forensic Medicine, J. Kluyskensstraat 29, 9000 Ghent, Belgium.
SO International journal of legal medicine, (2003 Feb) 117 (1) 2-9. Journal code: 9101456. ISSN: 0937-9827.
CY Germany: Germany, Federal Republic of
DT (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200307
ED Entered STN: 20030221
Last Updated on STN: 20030731
Entered Medline: 20030730
AB Abuse of amphetamine derivatives such as 3,4-methylenedioxymethamphetamine (MDMA) and 3,4-methylenedioxyamphetamine (MDA) is an important issue in current forensic practice and fatalities are not infrequent. Therefore, we investigated an immunohistochemical method to detect the amphetamine analogues MDMA and MDA in human tissues. For the staining procedure, the Catalysed Signal Amplification (CSA) method using peroxidase (HRP) provided by Dako and specific monoclonal **antibodies** were used. Appropriate controls for validation of the technique were included. The distribution of these designer drugs was studied in various brain regions including the four lobes, the basal ganglia, hypothalamus, hippocampus, corpus callosum, medulla oblongata, pons, cerebellar vermis and, additionally, in the pituitary gland. A distinct positive reaction was observed in all cortical brain regions and the neurons of the basal ganglia, the hypothalamus, the hippocampus and the cerebellar vermis but in the brainstem, relatively weak staining of neurons was seen. The reaction presented as a mainly diffuse cytoplasmic staining of the perikaryon of the neurons, and often axons and dendrites were also visualised. In addition, the immunoreactivity was present in the white matter. In the pituitary gland, however, distinct immunopositive cells were observed, with a prominent heterogeneity. The immunohistochemical findings were supported by the toxicological data. This immunostaining technique can be used as evidence of intake or even poisoning with MDMA and/or MDA and can be an interesting tool in forensic practice when the usual samples for toxicological analysis are not available. Furthermore, this method can be used to investigate the distribution of these substances in the human body.
CT Check Tags: Human; Male
3,4-Methylenedioxyamphetamine: BL, blood
*3,4-Methylenedioxyamphetamine: ME, metabolism
3,4-Methylenedioxyamphetamine: PO, poisoning

Adult
*Brain: ME, metabolism
Chromatography, High Pressure Liquid
Fatal Outcome
Hallucinogens: BL, blood
Hallucinogens: CH, chemistry
*Hallucinogens: ME, metabolism
Hallucinogens: PO, poisoning
Immunohistochemistry
Mass Fragmentography
N-Methyl-3,4-methylenedioxyamphetamine: BL, blood
*N-Methyl-3,4-methylenedioxyamphetamine: ME, metabolism
N-Methyl-3,4-methylenedioxyamphetamine: PO, poisoning
*Pituitary Gland: ME, metabolism
*Substance Abuse Detection: MT, methods
Tissue Distribution
RN **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine);**
4764-17-4 (3,4-Methylenedioxyamphetamine)
CN 0 (Hallucinogens)

L39 ANSWER 3 OF 51 MEDLINE on STN DUPLICATE 3
AN 2002718201 MEDLINE
DN PubMed ID: 12480182
TI Synaptotagmin I and IV are differentially regulated in the brain by the recreational drug 3,4-methylenedioxymethamphetamine (MDMA).
AU Peng Weiping; Premkumar Arumugam; Mossner Rainald; Fukuda Mitsunori; Lesch K Peter; Simantov Rabi
CS Department of Molecular Genetics, Weizmann Institute of Science, Rehovot 76100, Israel.
SO Brain research. Molecular brain research, (2002 Dec) 108 (1-2) 94-101. Journal code: 8908640. ISSN: 0169-328X.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200306
ED Entered STN: 20021218
Last Updated on STN: 20030617
Entered Medline: 20030616
AB 3,4-Methylenedioxymethamphetamine (MDMA or Ecstasy) is a widely abused drug. In brains of mice exposed to MDMA, we recently detected altered expression of several cDNAs and genes by using the differential display polymerase chain reaction (PCR) method. Expression of one such cDNA, which exhibited 98% sequence homology with the synaptic vesicle protein synaptotagmin IV, decreased 2 h after MDMA treatment. Herein, the effect of MDMA on expression of both synaptotagmin I and IV was studied in detail, since the two proteins are functionally interrelated. PCR analyses (semi-quantitative and real-time) confirmed that upon treatment with MDMA, expression of synaptotagmin IV decreased both in the midbrain and frontal cortex of mice. Decreases in the protein levels of synaptotagmin IV were confirmed by Western immunoblotting with anti-synaptotagmin IV **antibodies**. In contrast, the same exposure to MDMA increased expression of synaptotagmin I in the midbrain, a region rich in serotonergic neurons, but not in the frontal cortex. This differential expression was confirmed at the protein level with anti-synaptotagmin I **antibodies**. MDMA did not induce down- or up-regulation of synaptotagmin IV and I, respectively, in serotonin transporter knockout mice (-/-) that are not sensitive to MDMA. Therefore, psychoactive drugs, such as MDMA, appear to modulate expression

of synaptic vesicle proteins, and possibly vesicle trafficking, in the brain.

CT Check Tags: Human; Male; Support, Non-U.S. Gov't
Animals
*Brain: DE, drug effects
*Brain: ME, metabolism
Carrier Proteins: GE, genetics
Carrier Proteins: ME, metabolism
Down-Regulation: PH, physiology
Hallucinogens
Membrane Glycoproteins: GE, genetics
*Membrane Glycoproteins: ME, metabolism
Mice
Mice, Inbred C57BL
Mice, Knockout
*N-Methyl-3,4-methylenedioxyamphetamine: PD, pharmacology
Nerve Tissue Proteins: GE, genetics
*Nerve Tissue Proteins: ME, metabolism
RNA, Messenger: ME, metabolism
*Serotonin Agents: PD, pharmacology

RN 134193-27-4 (synaptotagmin); **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**

CN 0 (Carrier Proteins); 0 (Hallucinogens); 0 (Membrane Glycoproteins); 0 (Nerve Tissue Proteins); 0 (RNA, Messenger); 0 (SLC6A4 protein, human); 0 (Serotonin Agents)

L39 ANSWER 4 OF 51 MEDLINE on STN DUPLICATE 5
AN 2001565533 MEDLINE
DN PubMed ID: 11672589
TI Methylenedioxymethamphetamine (MDMA; 'Ecstasy') suppresses antigen specific IgG2a and IFN-gamma production.
AU Connor T J; Connelly D B; Kelly J P
CS Department of Pharmacology, National University of Ireland, Galway, Ireland.. thomas.connor@nuigalway.ie
SO Immunology letters, (2001 Sep 3) 78 (2) 67-73.
Journal code: 7910006. ISSN: 0165-2478.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200112
ED Entered STN: 20011024
Last Updated on STN: 20020122
Entered Medline: 20011207

AB Methylenedioxymethiamphetamine (MDMA; "Ecstasy") is a widely abused amphetamine derivative. In the present study, we examined the effect of acute MDMA administration on an antigen specific immune response. Responsiveness to an in vivo challenge with the soluble protein antigen keyhole limpet haemocyanin (KLH) was examined in rats following MDMA administration (2.5, 5 or 10 mg/kg; i.p.). KLH-specific serum IgM concentrations were measured 7 days following challenge, and serum IgG concentrations were measured 14 days following the KLH challenge. In addition, antigen-specific IFN-gamma and IL-6 production was measured in KLH-stimulated splenocytes. MDMA did not alter the KLH-specific IgM response. In contrast, MDMA (5 and 10 mg/kg) provoked a significant suppression of KLH-specific IgG production. Thus, MDMA administration did not alter the initial generation of the **antibody** response but rather inhibited **antibody** class switching from IgM to IgG. Two pathways for the genetic switch from IgM to IgG production were

investigated. One pathway requires the Th(1) type cytokine IFN-gamma to stimulate IgM-secreting cells to switch to IgG(2a)-secreting cells. Another pathway requires the Th(2) type cytokines IL-4 and IL-6 to stimulate IgM-secreting cells to switch to IgG(1)-secreting cells. IgG(1) and IgG(2a) levels were measured to determine if these two pathways were differentially affected. The results indicate that only IgG(2a) levels were decreased following MDMA administration. Furthermore, this decrease in IgG(2a) was accompanied by decreased KLH-specific IFN-gamma production 14 days post KLH administration. In conclusion, these data indicate that MDMA alters the ability to switch from IgM to IgG(2a) production, possibly by reducing IFN-gamma. Potential health consequences for MDMA users are discussed.

CT Check Tags: Female; Support, Non-U.S. Gov't
Animals
***Antibody Specificity: DE, drug effects**
*Epitopes, T-Lymphocyte: IM, immunology
*Hemocyanin: IM, immunology
*Immunoglobulin G: BI, biosynthesis
Immunoglobulin G: BL, blood
Immunoglobulin M: BI, biosynthesis
Immunoglobulin M: BL, blood
Injections, Intraperitoneal
*Interferon Type II: AI, antagonists & inhibitors
*Interferon Type II: BI, biosynthesis
Interferon Type II: BL, blood
Interleukin-6: BI, biosynthesis
Mollusca: IM, immunology
N-Methyl-3,4-methylenedioxyamphetamine: AD, administration & dosage
*N-Methyl-3,4-methylenedioxyamphetamine: PD, pharmacology
Rats
Rats, Sprague-Dawley
Time Factors

RN **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**; 82115-62-6 (Interferon Type II); 9013-72-3 (Hemocyanin)

CN 0 (Epitopes, T-Lymphocyte); 0 (Immunoglobulin G); 0 (Immunoglobulin M); 0 (Interleukin-6); 0 (keyhole-limpet hemocyanin)

L39 ANSWER 5 OF 51 MEDLINE on STN DUPLICATE 7
AN 96425217 MEDLINE
DN PubMed ID: 8827668
TI Antibodies to arthropod-borne encephalitis viruses in small mammals from southern Florida.
AU Day J F; Stark L M; Zhang J T; Ramsey A M; Scott T W
CS Florida Medical Entomology Laboratory, University of Florida, Vero Beach 32962, USA.
NC AI-20983 (NIAID)
AI-22119 (NIAID)
AI-26787 (NIAID)
SO Journal of wildlife diseases, (1996 Jul) 32 (3) 431-6.
Journal code: 0244160. ISSN: 0090-3558.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199701
ED Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970121
AB From 1987 through 1991, blood samples were collected from 10 species of

small mammals in Indian River Country, Florida (USA). Sera from 1,347 animals were analyzed for hemagglutination-inhibition (HI) antibody to St. Louis encephalitis (SLE) and eastern equine encephalitis (EEE) viruses. Of these, 75 (5.6%) were positive for HI antibody to SLE virus and 121 (9.0%) were positive for EEE antibody. Sera from five mammalian species were tested for neutralizing (NT) antibody to SLE, EEE, Highlands J (HJ a member of the western equine encephalitis virus complex), or Everglades (EVE, a member of the Venezuelan equine encephalitis complex) viruses. By serum neutralization tests, 26 (46%) of 57 had SLE antibodies, 14 (24%) of 58 had EEE antibodies, two (3.2%) of 63 had HJ antibodies, and 9 (14%) of 63 had **EVE antibodies**. One Sigmodon hispidus and one Peromyscus gossypinus had NT antibodies both to EEE and HJ viruses. Blood samples from 512 mammals were tested for virus. Isolations of one EVE virus and two unidentified arenaviruses were made from P. gossypinus and one EVE virus isolate was made from a S. hispidus.

CT Check Tags: Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Animals
*Antibodies, Viral: BL, blood
*Encephalitis Virus, Eastern Equine: IM, immunology
*Encephalitis Virus, St. Louis: IM, immunology
Encephalitis, St. Louis: EP, epidemiology
*Encephalitis, St. Louis: VE, veterinary
Encephalomyelitis, Equine: EP, epidemiology
*Encephalomyelitis, Equine: VE, veterinary
Florida: EP, epidemiology
Hemagglutination Inhibition Tests: VE, veterinary
Hesperomyinae
*Mammals
Neutralization Tests: VE, veterinary
Opossums
Peromyscus
Prevalence
Rodent Diseases: EP, epidemiology
Sciuridae

CN 0 (Antibodies, Viral)

L39 ANSWER 6 OF 51 MEDLINE on STN DUPLICATE 9
AN 94359473 MEDLINE
DN PubMed ID: 7915818
TI Mutations in some Polycomb group genes of Drosophila interfere with regulation of segmentation genes.
AU McKeon J; Slade E; Sinclair D A; Cheng N; Couling M; Brock H W
CS Department of Zoology, University of British Columbia, Vancouver, Canada.
SO Molecular & general genetics : MGG, (1994 Sep 1) 244 (5) 474-83.
Journal code: 0125036. ISSN: 0026-8925.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199410
ED Entered STN: 19941013
Last Updated on STN: 19950206
Entered Medline: 19941006
AB Mutations in several Polycomb (Pc) group genes cause maternal-effect or zygotic segmentation defects, suggesting that Pc group genes may regulate the segmentation genes of Drosophila. We show that individuals doubly heterozygous for mutations in polyhomeotic and six other Pc group genes show gap, pair rule, and segment polarity segmentation defects. We examined double heterozygous combinations of Pc group and segmentation

mutations for enhancement of adult and embryonic segmentation defects. Posterior sex combs and polyhomeotic interact with Kruppel and enhance embryonic phenotypes of hunchback and knirps, and polyhomeotic enhances even-skipped. Surprisingly, flies carrying duplications of extra sex combs (esc), that were heterozygous for mutations of even-skipped (eve), were extremely subvital. Embryos and surviving adults of this genotype showed strong segmentation defects in even-numbered segments. **Antibody** studies confirm that expression of **eve** is suppressed by duplications of esc. However, esc duplications have no effect on other gap or pair rule genes tested. To our knowledge, this is only the second triplo-abnormal phenotype associated with Pc group genes. Duplications of nine other Pc group genes have no detectable effect on eve. Expression of engrailed (en) was abnormal in the central nervous systems of most Pc group mutants. These results support a role for Pc genes in regulation of some segmentation genes, and suggest that esc may act differently from other Pc group genes.

CT Check Tags: Female; Male; Support, Non-U.S. Gov't
Abdomen: EM, embryology
Animals
*Central Nervous System: EM, embryology
Chromatin: CH, chemistry
*Drosophila melanogaster: EM, embryology
Drosophila melanogaster: GE, genetics
Ectoderm: PH, physiology
Embryo, Nonmammalian: GD, growth & development
*Gene Expression Regulation
*Genes, Homeobox
*Genes, Insect
Heterozygote
Multigene Family
Repressor Proteins: PH, physiology
Thorax: EM, embryology
Transcription, Genetic
CN 0 (Chromatin); 0 (Repressor Proteins)
GEN Asx; Pc; Pcl; Psc; Sce; Scm; en; esc; eve; ph

L39 ANSWER 7 OF 51 MEDLINE on STN DUPLICATE 10
AN 94158817 MEDLINE
DN PubMed ID: 7906857
TI Participation of cytochrome P450-2B and -2D isozymes in the demethylenation of methylenedioxymethamphetamine enantiomers by rats.
AU Kumagai Y; Lin L Y; Hiratsuka A; Narimatsu S; Suzuki T; Yamada H; Oguri K; Yoshimura H; Cho A K
CS Department of Pharmacology, University of California, Los Angeles School of Medicine 90024.
NC DA04206 (NIDA)
SO Molecular pharmacology, (1994 Feb) 45 (2) 359-65.
Journal code: 0035623. ISSN: 0026-895X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199403
ED Entered STN: 19940406
Last Updated on STN: 19950206
Entered Medline: 19940331
AB The cytochrome P450 isozymes in rat liver microsomes that catalyze the demethylenation of methylenedioxymethamphetamine enantiomers to the corresponding dihydroxymethamphetamine were characterized.

Dihydroxymethamphetamine formation in liver microsomes from male Sprague-Dawley rats exhibited multienzyme kinetics, with Km values in the micromolar/millimolar range. The stereoselectivity [(+)-isomer versus (-)-isomer] varied from 0.78 to 1.94 after pretreatment of the rats with phenobarbital, 3-methylcholanthrene, pregnenolone-16 alpha-carbonitrile, or pyrazole, suggesting that different isozymes participate in the reaction. The low-Km demethylenation was not induced by these compounds and was not inhibited by **antibodies** raised against CYP2C11. Liver microsomes from female Dark-Agouti rats, a strain genetically deficient in CYP2D1, exhibited demethylenation activities that were 9% of those in microsomes from male Sprague-Dawley rats. The low-Km demethylenation was also inhibited by CYP2D substrates such as sparteine, bufuralol, or desipramine and was almost completely inhibited by **antibodies** against P450 BTL, which belongs to the CYP2D family. The higg-Km demethylation activity was induced by phenobarbital and pregnenolone-16 alpha-carbonitrile and the activity in both untreated and phenobarbital-induced microsomes was suppressed by anti-CYP2B1 IgG. Experiments with IgG raised against cytochrome b5 suggested that the hemoprotein contributed to the low-Km activity but not the high-Km activity. These results indicate that cytochrome P450 isozymes belonging to the CYP2D subfamily catalyze demethylenation with low Km values and that the reaction occurring with high Km values is likely to be mediated by members of the CYP2B family, but with the possible participation of other phenobarbital-inducible isoforms.

CT Check Tags: Female; Male; Support, U.S. Gov't, P.H.S.
*3,4-Methylenedioxyamphetamine: AA, analogs & derivatives
3,4-Methylenedioxyamphetamine: ME, metabolism
Animals
Antibodies
Biotransformation
Cytochrome P-450 Enzyme System: AI, antagonists & inhibitors
Cytochrome P-450 Enzyme System: IM, immunology
*Cytochrome P-450 Enzyme System: ME, metabolism
Designer Drugs: ME, metabolism
Enzyme Induction
Isoenzymes: AI, antagonists & inhibitors
Isoenzymes: IM, immunology
*Isoenzymes: ME, metabolism
Kinetics
*Microsomes, Liver: EN, enzymology
N-Methyl-3,4-methylenedioxyamphetamine
Phenobarbital: PD, pharmacology
Rats
Rats, Sprague-Dawley
Stereoisomerism

RN **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**; **4764-17-4 (3,4-Methylenedioxyamphetamine)**; 50-06-6 (Phenobarbital); 9035-51-2 (Cytochrome P-450 Enzyme System)
CN 0 (**Antibodies**); 0 (Designer Drugs); 0 (Isoenzymes)

L39 ANSWER 8 OF 51 MEDLINE on STN DUPLICATE 11
AN 93062835 MEDLINE
DN PubMed ID: 1435745
TI Regiochemical differences in cytochrome P450 isozymes responsible for the oxidation of methylenedioxyphenyl groups by rabbit liver.
AU Kumagai Y; Lin L Y; Philpot R M; Yamada H; Oguri K; Yoshimura H; Cho A K
CS Department of Pharmacology, UCLA School of Medicine 90024.
NC DA 04206 (NIDA)
SO Molecular pharmacology, (1992 Oct) 42 (4) 695-702.

Journal code: 0035623. ISSN: 0026-895X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199212
ED Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921201

AB The cytochrome P450 isozymes catalyzing the oxidation of the methylenedioxyphenyl compounds methylenedioxybenzene (MDB) and methylenedioxyamphetamine (MDA) have been investigated in rabbit liver preparations. The aromatic ring in MDB undergoes both demethylenation to catechol and aromatic hydroxylation to sesamol, whereas that in MDA undergoes only demethylenation to dihydroxyamphetamine. Formation of catechol and sesamol from MDB in microsomal incubation mixtures was enhanced about 5- and 3-fold, respectively, by pretreatment of the rabbits with phenobarbital, which induced CYP2B4 and CYP4B1. The cytochrome P450 isozyme responsible for aromatic hydroxylation of MDB was induced by beta-naphthoflavone and was inhibited by alpha-naphthoflavone. Microsomal demethylenation of MDA was minimally sensitive to pretreatment of the rabbits with phenobarbital, beta-naphthoflavone, pyrazole, or rifampicin. However, MDA competitively inhibited the N-demethylation of erythromycin. **Antibodies** against CYP2B4, but not those against CYP4B1, caused a marked inhibition of the demethylenation and aromatic hydroxylation of MDB. **Antibodies** against CYP2C3 did not inhibit the demethylenation of MDA, nor did substrates or inhibitors of the CYP2D family except for bufuralol. MDB and MDA were both capable of forming metabolic intermediate complexes, and the rate of complex formation was accelerated by phenobarbital induction. Reconstitution experiments with CYP2B4 suggested that phenobarbital-inducible complex formation from MDA was not due to the carbene pathway involving the methylenedioxy group but was due to oxidation of the amino group. These results indicate that CYP2B4 oxidizes different regions of methylenedioxyphenyl compounds depending on their structure. MDB undergoes oxidation at the methylenedioxy group (major) and the benzene ring (minor). MDA is oxidized at the alkylamino side chain at the nitrogen and alpha-carbon. The results suggested that one or more constitutive isoforms (probably unknown) of cytochrome P450 present in rabbit liver microsomes are primarily responsible for MDA demethylenation but that CYP3A6 contributes slightly.

CT Check Tags: Support, U.S. Gov't, Non-P.H.S.; Support, U.S. Gov't, P.H.S.
*3,4-Methylenedioxyamphetamine: ME, metabolism
Animals
Biotransformation
*Cytochrome P-450 Enzyme System: ME, metabolism
*Dioxoles: ME, metabolism
Enzyme Induction
Isoenzymes: ME, metabolism
*Microsomes, Liver: EN, enzymology
Oxidation-Reduction
Rabbits

RN 274-09-9 (1,3-benzodioxole); **4764-17-4 (3,4-Methylenedioxyamphetamine)**; 9035-51-2 (Cytochrome P-450 Enzyme System)
CN 0 (Dioxoles); 0 (Isoenzymes)

L39 ANSWER 9 OF 51 MEDLINE on STN DUPLICATE 12
AN 92354191 MEDLINE

DN PubMed ID: 1386563
TI On the origin of C3 nephritic factor (antibody to the alternative pathway C3 convertase): evidence for the Adam and **Eve** concept of **autoantibody** production.
AU Spitzer R E; Stitzel A E; Tsokos G
CS Department of Pediatrics, SUNY Health Science Center, Syracuse 13210.
SO Clinical immunology and immunopathology, (1992 Sep) 64 (3) 177-83.
Journal code: 0356637. ISSN: 0090-1229.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
(META-ANALYSIS)
LA English
FS Priority Journals
EM 199209
ED Entered STN: 19920925
Last Updated on STN: 19920925
Entered Medline: 19920908
AB The antibody to the alternative pathway C3 convertase, designated C3 nephritic factor or C3NeF, is an autoantibody that is produced in everyone from the time of birth. The elaboration of C3NeF utilizes germline V-region genes which undergo antigen-driven affinity maturation, resulting in an autoantibody that is produced in large amounts with high affinity and narrow specificity. Our data also suggest that under normal conditions, the idiotypic network may play an important part in the control of this autoantibody. Further, a defect in the network with loss of control or inappropriate stimulation may be an underlying mechanism in the unrestricted production of C3NeF in patients with membranoproliferative glomerulonephritis.
CT Check Tags: Human
Adult
Antibodies, Anti-Idiotypic: IM, immunology
Antibody Formation
Autoantibodies: IM, immunology
*Complement 3 Nephritic Factor: IM, immunology
Immunoglobulin Idiotypes: IM, immunology
Infant, Newborn
Meta-Analysis
CN 0 (Antibodies, Anti-Idiotypic); 0 (Autoantibodies); 0 (Complement 3 Nephritic Factor); 0 (Immunoglobulin Idiotypes)

L39 ANSWER 10 OF 51 MEDLINE on STN DUPLICATE 13
AN 91087500 MEDLINE
DN PubMed ID: 1979827
TI Detection of D,L-amphetamine, D,L-methamphetamine, and illicit amphetamine analogs using diagnostic products corporation's amphetamine and methamphetamine radioimmunoassay.
AU Cody J T
CS Air Force Drug Testing Laboratory, Brooks AFB, Texas 78235-5000.
SO Journal of analytical toxicology, (1990 Sep-Oct) 14 (5) 321-4.
Journal code: 7705085. ISSN: 0146-4760.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199102
ED Entered STN: 19910322
Last Updated on STN: 19950206
Entered Medline: 19910201
AB Cross-reactivity with Diagnostic Products Corporation (DPC) amphetamine

and methamphetamine radioimmunoassay (RIA) reagents was determined for amphetamine, methamphetamine, and a number of amphetamine analogs. Concentrations from 100 to 100,000 ng/mL were assayed. 3,4-Methylenedioxyamphetamine (MDA) and 3,4-methylenedioxymethamphetamine (MDMA) showed significant cross-reactivity for the amphetamine and methamphetamine reagents respectively. 4-Hydroxymethamphetamine, 3,4-methylenedioxyethylamphetamine (MDEA), and N,N-dimethyl-MDA also showed significant cross-reactivity with the methamphetamine reagents, but less than MDMA. None of the other analogs showed a positive result with the amphetamine or methamphetamine reagents at even the highest concentration, although several did show measurable cross-reactivity. The L isomers of amphetamine and methamphetamine showed substantially less cross-reactivity than the D forms to which the respective **antibody** systems are targeted.

CT 3,4-Methylenedioxyamphetamine: AA, analogs & derivatives
3,4-Methylenedioxyamphetamine: AN, analysis
3,4-Methylenedioxyamphetamine: IM, immunology
*Amphetamines: AN, analysis
Cross Reactions
Indicators and Reagents
Isomerism
*Methamphetamine: AN, analysis
N-Methyl-3,4-methylenedioxyamphetamine
Radioimmunoassay

RN **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**;
4764-17-4 (3,4-Methylenedioxyamphetamine); 537-46-2 (Methamphetamine)

CN 0 (Amphetamines); 0 (Indicators and Reagents)

L39 ANSWER 11 OF 51 MEDLINE on STN DUPLICATE 14
AN 89038469 MEDLINE
DN PubMed ID: 2903272
TI Comparison of three commercial amphetamine immunoassays for detection of methamphetamine, methylenedioxyamphetamine, methylenedioxymethamphetamine, and methylenedioxyethylamphetamine.
AU Ruangyuttikarn W; Moody D E
CS Department of Pharmacology and Toxicology, University of Utah, College of Pharmacy, Salt Lake City 84112.
SO Journal of analytical toxicology, (1988 Jul-Aug) 12 (4) 229-33.
Journal code: 7705085. ISSN: 0146-4760.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198812
ED Entered STN: 19900308
Last Updated on STN: 19960129
Entered Medline: 19881220
AB Three commercial immunoassays for detection of amphetamines in urine, Abuscreen radioimmunoassay (RIA), enzyme-multiplied immunoassay technique (EMIT), and the TDx fluorescence polarization immunoassay (FPIA), have been investigated for detection of methamphetamine, 3,4-methylenedioxyamphetamine (MDA), 3,4-methylenedioxymethamphetamine (MDMA), and 3,4-methylenedioxyethylamphetamine (MDE). Blank urine was spiked with 0.1 to 3000 micrograms/mL amphetamine analog and used as sample in the assays. With the RIA and FPIA, MDA displayed a higher cross-reactivity to amphetamine than other analogs, but with EMIT, methamphetamine was relatively similar to amphetamine while MDA, MDMA, and MDE were less reactive. The high specificity RIA and the EMIT confirmation reagents for

urine amphetamines produced significant, but relatively minor, reduction in the detectability of these analogs. The variation in cross-reactivity seen between the different assays suggests that RIA, EMIT, and FPIA **antibodies** have different recognition sites; however, all three immunoassays do detect the illicit amphetamine analogs to varying degrees.

CT Check Tags: Comparative Study; Support, Non-U.S. Gov't
3,4-Methylenedioxyamphetamine: AA, analogs & derivatives
*3,4-Methylenedioxyamphetamine: UR, urine
*Amphetamines: UR, urine
Cross Reactions
Immunoassay
Immunoenzyme Techniques
*Methamphetamine: UR, urine
N-Methyl-3,4-methylenedioxyamphetamine
Radioimmunoassay
Reagent Kits, Diagnostic
*Street Drugs: UR, urine

RN **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**; **4764-17-4 (3,4-Methylenedioxyamphetamine)**; 537-46-2 (Methamphetamine); **82801-81-8 (3,4-methylenedioxyethamphetamine)**

CN 0 (Amphetamines); 0 (Reagent Kits, Diagnostic); 0 (Street Drugs)

L39 ANSWER 12 OF 51 MEDLINE on STN

AN 2004021750 MEDLINE

DN PubMed ID: 14504335

TI Acute basilar artery occlusion treated by thromboaspiration in a cocaine and ecstasy abuser.

AU Vallee J-N; Crozier S; Guillevin R; Obadia M; Lo D; Barragan-Campos H M; Samson Y; Chiras J

CS Department of Diagnostic and Interventional Neuroradiology, Pitie-Salpetriere Hospital, Medical Universite of Paris, France.. valleejn@free.fr

SO Neurology, (2003 Sep 23) 61 (6) 839-41.
Journal code: 0401060. ISSN: 1526-632X.

CY United States

DT (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 200404

ED Entered STN: 20040115
Last Updated on STN: 20040417
Entered Medline: 20040416

AB Thromboaspiration was performed in a young adult in a coma because of acute basilar artery occlusion associated with cocaine and ecstasy abuse 30 hours after symptom onset. There was complete recanalization of the basilar artery and favorable recovery. Because cocaine and ecstasy abuse has been reported to be a risk factor for ischemic stroke and fatal brain hemorrhage, thromboaspiration may be an alternative therapy to thrombolysis.

CT Check Tags: Female; Human
Adult
Antibodies, Monoclonal: TU, therapeutic use
Brain Ischemia: DT, drug therapy
*Brain Ischemia: ET, etiology
Brain Ischemia: SU, surgery
Catheterization
Cerebral Hemorrhage: PC, prevention & control
*Cocaine: AE, adverse effects

Cocaine: PK, pharmacokinetics
*Cocaine-Related Disorders: CO, complications
Coma: ET, etiology
Immunoglobulins, Fab: TU, therapeutic use
*N-Methyl-3,4-methylenedioxyamphetamine: AE, adverse effects
N-Methyl-3,4-methylenedioxyamphetamine: PK, pharmacokinetics
Pons: BS, blood supply
Serotonin: PH, physiology
Severity of Illness Index
*Substance-Related Disorders: CO, complications
Suction: IS, instrumentation
Thrombectomy: IS, instrumentation
*Thrombectomy: MT, methods
Thrombophilia: CI, chemically induced
Vasospasm, Intracranial: CI, chemically induced
Vertebrobasilar Insufficiency: DT, drug therapy
Vertebrobasilar Insufficiency: ET, etiology
*Vertebrobasilar Insufficiency: SU, surgery

RN 143653-53-6 (abciximab); **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine)**; 50-36-2 (Cocaine); 50-67-9 (Serotonin)
CN 0 (**Antibodies**, Monoclonal); 0 (Immunoglobulins, Fab)

L39 ANSWER 13 OF 51 MEDLINE on STN
AN 1999015555 MEDLINE
DN PubMed ID: 9800936
TI **Antibodies** against copper-oxidised and malondialdehyde-modified low density lipoproteins in pre-eclampsia pregnancies.
AU Uotila J; Solakivi T; Jaakkola O; Tuimala R; Lehtimaki T
CS Department of Obstetrics and Gynaecology, Tampere University Hospital, Finland.
SO British journal of obstetrics and gynaecology, (1998 Oct) 105 (10) 1113-7. Journal code: 7503752. ISSN: 0306-5456.
CY ENGLAND: United Kingdom
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199811
ED Entered STN: 19990106
Last Updated on STN: 19990106
Entered Medline: 19981110
AB OBJECTIVE: To measure auto-**antibodies** against oxidatively modified low density lipoprotein (LDL) in pre-eclamptic pregnancies using two different techniques. DESIGN: Clinical study comparing pre-eclamptic and normal pregnancies. SETTING: Tampere University Hospital, Finland. POPULATION: Twenty-one primigravidae with pre-eclampsia and 13 healthy, normotensive primigravidae as controls. METHODS: The serum titers of **antibodies** against both malondialdehyde-modified and copper-oxidised LDL (MDA-LDL and copper-ox LDL) were analysed and related to parameters reflecting the severity of pre-eclampsia. RESULTS: There was a positive correlation ($r = 0.58$) between **antibodies** against MDA-LDL and copper-ox LDL in women with pre-eclampsia but not in healthy pregnant controls. The **antibody** levels against copper-ox LDL, but not against MDA-LDL, were higher in women with pre-eclampsia than in women with a normal pregnancy ($P < 0.01$). While the **antibody** titers against copper-ox LDL did not correlate with any parameter reflecting the severity of pre-eclampsia, those against MDA-LDL showed a positive correlation with the level of diastolic blood pressure ($r = 0.54$)

and a negative correlation with platelet count (r = -0.61) in women with pre-eclampsia. CONCLUSION: There are increased titers of serum **autoantibodies** against copper-oxidised LDL in pre-eclampsia, which may reflect enhanced lipid peroxidation involving circulating lipoproteins.

CT Check Tags: Comparative Study; Female; Human; Support, Non-U.S. Gov't
3,4-Methylenedioxyamphetamine: IM, immunology
Adult
***Autoantibodies: AN, analysis**
Copper: IM, immunology
Gestational Age
*Lipoproteins, LDL: IM, immunology
Lipoproteins, LDL: ME, metabolism
Maternal Age
Oxidation-Reduction
*Pre-Eclampsia: IM, immunology
Pregnancy
Sensitivity and Specificity

RN **4764-17-4 (3,4-Methylenedioxyamphetamine)**; 7440-50-8 (Copper)
CN 0 (**Autoantibodies**); 0 (Lipoproteins, LDL)

L39 ANSWER 14 OF 51 MEDLINE on STN
AN 96285881 MEDLINE
DN PubMed ID: 8721431
TI Fatal poisoning by MDMA (ecstasy) and MDEA: a case report.
AU Fineschi V; Masti A
CS Department of Forensic Science, University of Siena, Policlinico Le Scotte, Italy.
SO International journal of legal medicine, (1996) 108 (5) 272-5.
Journal code: 9101456. ISSN: 0937-9827.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199610
ED Entered STN: 19961015
Last Updated on STN: 19961015
Entered Medline: 19961002

AB The first observation of lethal recreational use of MDMA (ecstasy) and MDEA in Italy is reported, together with extensive toxicological and histopathological documentation. Findings such as disseminated intravascular coagulation, rarely reported before, are colocated in the framework of the toxic syndrome for a better definition of criteria for forensic diagnosis.

CT Check Tags: Human
*3,4-Methylenedioxyamphetamine: AA, analogs & derivatives
3,4-Methylenedioxyamphetamine: PK, pharmacokinetics
3,4-Methylenedioxyamphetamine: PO, poisoning
Capillaries: PA, pathology
Designer Drugs: PK, pharmacokinetics
*Designer Drugs: PO, poisoning
Fluorescent Antibody Technique
Hallucinogens: PK, pharmacokinetics
*Hallucinogens: PO, poisoning
Kidney Tubules: PA, pathology
Lung: BS, blood supply
Mass Fragmentography
Myoglobinuria: BL, blood
*Myoglobinuria: CI, chemically induced

Myoglobinuria: PA, pathology
N-Methyl-3,4-methylenedioxyamphetamine: PK, pharmacokinetics
*N-Methyl-3,4-methylenedioxyamphetamine: PO, poisoning
Overdose: BL, blood
*Overdose: PA, pathology
Poisoning: BL, blood
*Poisoning: PA, pathology
Pulmonary Embolism: BL, blood
Pulmonary Embolism: CI, chemically induced
Pulmonary Embolism: PA, pathology
RN **42542-10-9 (N-Methyl-3,4-methylenedioxyamphetamine); 4764-17-4 (3,4-Methylenedioxyamphetamine); 82801-81-8 (3,4-methylenedioxyethamphetamine)**
CN 0 (Designer Drugs); 0 (Hallucinogens)

L39 ANSWER 15 OF 51 MEDLINE on STN
AN 94350052 MEDLINE
DN PubMed ID: 8070524
TI Immunocytochemical evidence for serotonergic neurotoxicity of N-ethyl-methylenedioxyamphetamine (MDE).
AU Series H G; Molliver M E
CS Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205.
NC NS15199 (NINDS)
SO Experimental neurology, (1994 Jul) 128 (1) 50-8.
Journal code: 0370712. ISSN: 0014-4886.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199409
ED Entered STN: 19941006
Last Updated on STN: 19960129
Entered Medline: 19940923
AB N-ethyl-3,4-methylenedioxyamphetamine (MDE) is one of a group of substituted amphetamines which have effects on several serotonergic markers such as tissue levels of serotonin and activity of tryptophan hydroxylase. In this study we have compared its effects on the rat brain with those of p-chloroamphetamine (PCA) using serotonin immunocytochemistry with a primary 5-HT **antibody** and a secondary avidin-biotin-HRP **antibody**. Two weeks after multiple (40 mg/kg x 8), but not single, injections of MDE there was a pronounced reduction in the number of serotonin-immunoreactive axons seen. This reduction was most marked in areas innervated extensively by serotonergic axons with varicosities of the fine type (e.g., posterior cerebral cortex and area CA1 of hippocampus). The reduction was quantitatively less than but qualitatively similar to that produced by a single dose of PCA (10 mg/kg). In material from short (3 day) survival animals, a large number of morphologically highly abnormal forms could be seen, suggestive of degenerating axons. A parallel series of sections prepared using tyrosine hydroxylase immunocytochemistry showed no differences between saline controls and PCA- or MDE-treated animals. We conclude that multiple systemic injections of MDE reduce the number of serotonin-immunoreactive fibers in the rat brain 2 weeks after treatment.
CT Check Tags: Comparative Study; Male; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
*3,4-Methylenedioxyamphetamine: AA, analogs & derivatives
3,4-Methylenedioxyamphetamine: PO, poisoning
Animals

Brain: CY, cytology
*Brain: DE, drug effects
*Brain: ME, metabolism
Cell Survival: DE, drug effects
Immunohistochemistry
*Neurons: DE, drug effects
*Neurons: ME, metabolism
Rats
Rats, Sprague-Dawley
*Serotonin: ME, metabolism
Time Factors
p-Chloroamphetamine: PD, pharmacology

RN **4764-17-4 (3,4-Methylenedioxyamphetamine)**; 50-67-9 (Serotonin); 64-12-0 (p-Chloroamphetamine); **82801-81-8 (3,4-methylenedioxyethamphetamine)**

L39 ANSWER 16 OF 51 MEDLINE on STN
AN 90189795 MEDLINE
DN PubMed ID: 2314063
TI Cross-reactivity of amphetamine analogues with Roche Abuscreen radioimmunoassay reagents.
AU Cody J T
CS Air Force Drug Testing Laboratory, Brooks AFB, TX 78235-5000.
SO Journal of analytical toxicology, (1990 Jan-Feb) 14 (1) 50-3.
Journal code: 7705085. ISSN: 0146-4760.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199004
ED Entered STN: 19900601
Last Updated on STN: 19980206
Entered Medline: 19900425
AB Cross-reactivity of amphetamine analogues with the Abuscreen amphetamine radioimmunoassay reagents was determined for both the standard and high specificity **antibody** systems. Compounds tested included 2-methoxyamphetamine, 4-hydroxymethamphetamine, 2,5-dimethoxyamphetamine (DMA), 4-bromo-2,5-dimethoxyamphetamine (DOB), 4-bromo-2,5-dimethoxy-beta-phenethylamine (BDMPEA), 3,4,5-trimethoxyamphetamine (TMA), 3,4-methylenedioxyamphetamine (MDA), N,N-dimethyl-3,4-methylenedioxyamphetamine and N-hydroxy-3,4-methylenedioxyamphetamine (N-OH MDA), 3,4-methylenedioxymethamphetamine (MDMA), 3,4-methylenedioxyethylamphetamine (MDEA), 2,5-dimethoxy-4-ethylamphetamine, 2,5-dimethoxy-4-methylamphetamine (DOM), and 3,4,5-trimethoxyphenethylamine (mescaline). Blank negative reference material was spiked with 1,000 to 100,000 ng/mL of the amphetamine analogue and used as sample in the assays. MDA was the only analogue that showed cross reactivity equal to or greater than that of amphetamine. None of the other analogue compounds demonstrated a positive result at even the highest concentration; however several showed depressed counts at various concentration levels.
CT Check Tags: Human
3,4-Methylenedioxyamphetamine: AN, analysis
*Amphetamines: AN, analysis
Cross Reactions
Indicators and Reagents
Iodine Radioisotopes: DU, diagnostic use
Mass Fragmentography
Radioimmunoassay

*Substance Abuse Detection: IS, instrumentation
*Substance-Related Disorders: DI, diagnosis
Substance-Related Disorders: UR, urine
RN **4764-17-4 (3,4-Methylenedioxyamphetamine)**
CN 0 (Amphetamines); 0 (Indicators and Reagents); 0 (Iodine Radioisotopes)

L39 ANSWER 17 OF 51 MEDLINE on STN
AN 88338593 MEDLINE
DN PubMed ID: 3421239
TI Risk factors for HIV infection in male sexual contacts of men with AIDS or an AIDS-related condition.
CM Comment in: Am J Epidemiol. 1989 Sep;130(3):618-9. PubMed ID: 2764008
AU Coates R A; Calzavara L M; Read S E; Fanning M M; Shepherd F A; Klein M H; Johnson J K; Soskolne C L
CS Department of Preventive Medicine and Biostatistics, Faculty of Medicine, University of Toronto, Ontario, Canada.
SO American journal of epidemiology, (1988 Oct) 128 (4) 729-39.
Journal code: 7910653. ISSN: 0002-9262.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 198810
ED Entered STN: 19900308
Last Updated on STN: 19970203
Entered Medline: 19881018
AB A total of 246 healthy male sexual contacts of men with either acquired immunodeficiency syndrome (AIDS) or an AIDS-related condition were recruited into a prospective study in Toronto, Canada between July 1984 and July 1985. At induction, data were collected on the sexual relationship between the contact and his primary case, sexual activities with other men, history of sexually transmitted diseases and other diseases, and use of recreational drugs. At recruitment, 144 sexual contacts had **antibodies** to human immunodeficiency virus (HIV); 102 of the contacts were seronegative at induction and at three months following recruitment. No association between HIV seropositivity and total number of sexual partners could be demonstrated. In univariate and multivariate analyses, receptive and insertive anal intercourse with the primary cases, and activities which either indicated or potentially caused anorectal mucosal injury (rectal douching, perianal bleeding, receipt of objects in ano, and receptive fisting) were strongly associated with HIV seropositivity. In the final multiple logistic regression model, two significant interaction effects were observed: the interaction between receptive anal intercourse and insertive anal intercourse and that between receptive anal intercourse and the anorectal mucosal injury index. These two interaction terms had negative regression coefficients which suggested that change in one sexual activity would not decrementally reduce risk of HIV infection without a comparable modification in the other activity. No association could be demonstrated between oral-genital and oral-anal sexual contact and odds ratios for these sexual activities declined to levels below 1.0 when adjusted for frequency of receptive anal intercourse.
CT Check Tags: Human; Male; Support, Non-U.S. Gov't
3,4-Methylenedioxyamphetamine: AE, adverse effects
*Acquired Immunodeficiency Syndrome: ET, etiology
Acquired Immunodeficiency Syndrome: TM, transmission
Adult
*HIV Seropositivity: ET, etiology
HIV Seropositivity: TM, transmission

Homosexuality
Questionnaires
Risk Factors
*Sexual Behavior
*Sexual Partners
RN **4764-17-4 (3,4-Methylenedioxyamphetamine)**

L39 ANSWER 18 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 6
AN 1998418639 EMBASE
TI Screening for urinary amphetamine and analogs by capillary electrophoretic immunoassays and confirmation by capillary electrophoresis with on-column multiwavelength absorbance detection.
AU Ramseier A.; Caslavska J.; Thormann W.
CS Dr. W. Thormann, Department of Clinical Pharmacology, Murtenstrasse 35, CH-3010 Bern, Switzerland. wolfgang.thormann@ikp.unibe.ch
SO Electrophoresis, (1998) 19/16-17 (2956-2966).
Refs: 34
ISSN: 0173-0835 CODEN: ELCTDN
CY Germany
DT Journal; Conference Article
FS 027 Biophysics, Bioengineering and Medical Instrumentation
030 Pharmacology
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
LA English
SL English
AB This paper characterizes competitive binding, electrokinetic capillary-based immunoassays for screening of urinary amphetamine (A) and analogs using reagents which were commercialized for a fluorescence polarization immunoassay (FPIA). After incubation of 25 μL urine with the reactants, a small aliquot of the mixture is applied onto a fused-silica capillary and unbound fluorescein-labeled tracer compounds are monitored by capillary electrophoresis with on-column laser-induced fluorescence detection. Configurations in presence and absence of micelles were investigated and found to be capable of recognizing urinary D-(+)amphetamine at concentrations > about 80 ng/mL. Similar responses were obtained for racemic methamphetamine (MA) and 3,4-methylenedioxymethamphetamine (MDMA). The electrokinetic immunoassay data suggest that the FPIA reagent kit includes two immunoassay systems (two **antibodies** and two tracer molecules), one that recognizes MA and MDMA, and one that is geared towards monitoring of A. For confirmation analysis of urinary amphetamines and ephedrines, capillary electrophoresis in a pH 9.2 buffer and multiwavelength UV detection was employed. The suitability of the electrokinetic methods for screening and confirmation is demonstrated via analysis of patient and external quality control urines.
CT Medical Descriptors:
*drug determination
*drug urine level
capillary electrophoresis
immunoassay
pH
micelle
quality control
drug isolation
human
controlled study
conference paper

Drug Descriptors:
*amphetamine: AN, drug analysis
*amphetamine: CR, drug concentration
*methamphetamine: AN, drug analysis
*methamphetamine: CR, drug concentration
*3,4 methylenedioxymethamphetamine: AN, drug analysis
*3,4 methylenedioxymethamphetamine: CR, drug concentration
fluorescein
ephedrine derivative
buffer

RN (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (fluorescein) 2321-07-5, 91316-42-6

NP (1) P/ACE 5510; (2) BioFocus 3000

CO (1) Beckman (United States) ; (2) Biorad (United States)

L39 ANSWER 19 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN DUPLICATE 8

AN 96349235 EMBASE

DN 1996349235

TI Chromophore-assisted laser inactivation of even skipped in Drosophila precisely phenocopies genetic loss of function.

AU Schroder R.; Tautz D.; Jay D.G.

CS Dept. Molecular Cellular Biology, Harvard University,Cambridge, MA 02138, United States

SO Development Genes and Evolution, (1996) 206/1 (86-88).
ISSN: 0949-944X CODEN: DGEVFT

CY Germany

DT Journal; Article

FS 021 Developmental Biology and Teratology
022 Human Genetics

LA English

SL English

AB The even skipped (eve) gene in Drosophila encodes a homeo-domain protein that acts as a trancriptional regulator during early embryogenesis. We show that an injection of a monoclonal **antibody** against the **eve** homeodomain in conjunction with chromophore-assisted laser inactivation (CALI) precisely phenocopies the eve mutant phenotype. Depending on the time of the laser treatment, both the early pair-rule function, as well as the later segmental function of eve can be blocked. This suggests that it might be possible to employ CALI to analyse the function of transcriptional regulators in species that are not amenable to genetic analysis.

CT Medical Descriptors:
*chromatophore
*gene repression
*homeobox
animal experiment
animal tissue
article
controlled study
drosophila
embryo
embryo development
laser
mutant
nonhuman
phenotype

priority journal
Drug Descriptors:
homeodomain protein
monoclonal antibody
transcription factor

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AN 2004266786 EMBASE

TI 3,4-Methylenedioxymethamphetamine increases interleukin-1β levels and activates microglia in rat brain: Studies on the relationship with acute hyperthermia and 5-HT depletion.

AU Orio L.; O'Shea E.; Sanchez V.; Pradillo J.M.; Escobedo I.; Camarero J.; Moro M.A.; Green A.R.; Colado M.I.

CS M.I. Colado, Departamento de Farmacologia, Facultad de Medicina, Universidad Complutense, Madrid 28040, Spain. colado@med.ucm.es

SO Journal of Neurochemistry, (2004) 89/6 (1445-1453).
Refs: 52
ISSN: 0022-3042 CODEN: JONRA

CY United Kingdom

DT Journal; Article

FS 008 Neurology and Neurosurgery
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
052 Toxicology

LA English

SL English

AB 3,4-Methylenedioxymethamphetamine (MDMA) administration to rats produces acute hyperthermia and 5-HT release. Interleukin-1β (IL-1β) is a pro-inflammatory pyrogen produced by activated microglia in the brain. We examined the effect of a neurotoxic dose of MDMA on IL-1β concentration and glial activation and their relationship with acute hyperthermia and 5-HT depletion. MDMA, given to rats housed at 22°C, increased IL-1β levels in hypothalamus and cortex from 1 to 6 h and [(3)H]-(1-(2-chlorophenyl) -N-methyl-N-(1-methylpropyl)3-isoquinolinecarboxamide) binding between 3 and 48 h. Increased immunoreactivity to OX-42 was also detected. Rats became hyperthermic immediately after MDMA and up to at least 12 h later. The IL-1 receptor antagonist did not modify MDMA-induced hyperthermia indicating that IL-1β release is a consequence, not the cause, of the rise in body temperature. When MDMA was given to rats housed at 4°C, hyperthermia was abolished and the IL-1β increase significantly reduced. The MDMA-induced acute 5-HT depletion was prevented by fluoxetine coadministration but the IL-1β increase and hyperthermia were unaffected. Therefore, the rise in IL-1β is not related to the acute 5-HT release but is linked to the hyperthermia. Contrary to IL-1β levels, microglial activation is not significantly modified when hyperthermia is prevented, suggesting that it might be a process not dependent on the hyperthermic response induced by MDMA.

CT Medical Descriptors:
*hyperthermia
*serotonin release
*neurotoxicity
*microglia
cytokine release
inflammation
hypothalamus
brain cortex
nonhuman

male
rat
animal experiment
animal model
controlled study
animal tissue
article
priority journal
Drug Descriptors:
*interleukin 1beta: EC, endogenous compound
*3,4 methylenedioxymethamphetamine: TO, drug toxicity
*3,4 methylenedioxymethamphetamine: PD, pharmacology
*3,4 methylenedioxymethamphetamine: IP, intraperitoneal drug administration
*serotonin: EC, endogenous compound
pyrogen: EC, endogenous compound
n sec butyl 1 (2 chlorophenyl) n methyl 3 isoquinolinecarboxamide
ox 42
monoclonal antibody
cell marker
CD11b antigen
interleukin 1 receptor blocking agent: CV, intracerebroventricular drug administration
fluoxetine: IP, intraperitoneal drug administration
glial fibrillary acidic protein: EC, endogenous compound
unclassified drug
RN (3,4 methylenedioxymethamphetamine) **42542-10-9**; (serotonin) 50-67-9; (n sec butyl 1 (2 chlorophenyl) n methyl 3 isoquinolinecarboxamide) 85532-75-8; (fluoxetine) 54910-89-3, 56296-78-7, 59333-67-4
CN 'ecstasy'; Pk 11195
CO Amgen (United States); Nida (United States); Lilly (Spain)

L39 ANSWER 21 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2003337130 EMBASE
TI Enkephalin contributes to the locomotor stimulating effects of 3,4-methylenedioxy-N-methylamphetamine.
AU Compan V.; Scearce-Levie K.; Crosson C.; Daszuta A.; Hen R.
CS Dr. V. Compan, Lab. de Genomique Fonct., CNRS, Marseille, United States. Valerie.Compan@ccipe.cnrs.fr
SO European Journal of Neuroscience, (2003) 18/2 (383-390).
Refs: 64
ISSN: 0953-816X CODEN: EJONEI
CY United Kingdom
DT Journal; Article
FS 008 Neurology and Neurosurgery
040 Drug Dependence, Alcohol Abuse and Alcoholism
LA English
SL English
AB 3,4-Methylenedioxy-N-methylamphetamine (MDMA, 'Ecstasy') is a potent inhibitor of serotonin uptake, which induces both an increase in locomotion and a decrease in exploratory activity in rodents. Serotonin 5-HT(1B) receptors, located on the terminals of striatal efferent neurons, have been suggested to mediate these motor effects of MDMA. Striatal neurons projecting to the globus pallidus contain metenkephalin, whilst those projecting to the substantia nigra contain substance P. We therefore analysed the levels of both peptides using radioimmunocytochemistry after MDMA administration (10 mg/kg, 3 h) in wild-type and 5-HT(1B) receptor

knockout mice. Our results demonstrate that MDMA induces a decrease in pallidal met-enkephalin immunolabelling in wild-type, but not in 5-HT(1B) receptor knockout mice. Similar results were obtained following treatment with the 5-HT (1A/1B) agonist RU24969 (5 mg/kg, 3 h), suggesting that activation of 5-HT(1B) receptors leads to a reduction in met-enkephalin levels in the globus pallidus. In contrast, MDMA had no effect on the nigral substance P levels. We have previously shown that both MDMA and RU24969 fail to stimulate locomotor activity in 5-HT(1B) receptor knockout mice. Our present data indicate that the opioid antagonist naloxone suppressed the locomotor effects of MDMA. This study is the first to demonstrate that Enk contributes to MDMA-induced increases in locomotor activity. Such an effect may be related to the 5-HT control of pallidal met-enkephalin levels via the 5-HT(1B) receptors.

CT Medical Descriptors:
*locomotion
exploratory behavior
animal behavior
stria terminalis
efferent nerve
globus pallidus
peptide analysis
immunocytochemistry
wild type
knockout mouse
antibody labeling
substantia nigra
nonhuman
mouse
animal experiment
controlled study
animal tissue
article
priority journal
Drug Descriptors:
*enkephalin derivative: EC, endogenous compound
*3,4 methylenedioxymethamphetamine
serotonin uptake inhibitor
serotonin 1B receptor: EC, endogenous compound
metenkephalin: EC, endogenous compound
substance P: EC, endogenous compound
serotonin 1A agonist
serotonin 1B agonist
5 methoxy 3 (1,2,3,6 tetrahydro 4 pyridyl) 1h indole
opiate antagonist
naloxone

RN (3,4 methylenedioxymethamphetamine) **42542-10-9**; (metenkephalin) 58569-55-4; (substance P) 33507-63-0; (5 methoxy 3 (1,2,3,6 tetrahydro 4 pyridyl) 1h indole) 66611-26-5; (naloxone) 357-08-4, 465-65-6

L39 ANSWER 22 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2003142445 EMBASE

TI Bone sialoprotein promotes tumor cell migration in both in vitro and in vitro models.

AU Chen J.; Rodriguez J.A.; Barnett B.; Hashimoto N.; Tang J.

CS J.J. Chen, Department of Pediatric Dentistry, Univ. of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78229, United States. Chenj2@uthscsa.edu

SO Connective Tissue Research, (2003) 44/SUPPL. 1 (279-284).

Refs: 23
ISSN: 0300-8207 CODEN: CVTRBC
CY United Kingdom
DT Journal; Article
FS 005 General Pathology and Pathological Anatomy
016 Cancer
LA English
SL English
AB The present study was conducted to determine the effects of bone sialoprotein (BSP) in promoting vascular invasion of tumor cells in metastasis. We used a Matrigel system and the MDA-231 human breast cancer cells transfected with human BSP cDNA (MDA-231/BSP). Quantative analysis indicated an average of 1.7-fold increase in cell numbers that migrated through the endothelial cells in MDA-231/BSP cells compared with empty vector-transfected MDA-231 cells (MDA-231/EV). In an in vivo assay, the MDA-231 cells were incubated with or without BSP **antibodies** and were then inoculated onto the upper chorioallantoic membrane (CAM) of chicken embryos, in which the only route for the tumor cells to reach the lower CAM was to migrate through the embryonic vasculature. PCR amplification using human Alu primers and genomic DNA from harvested lower CAM showed an average reduction of 67% in the samples treated with BSP **antibodies**. These preliminary data suggest that, in metastasis, BSP may enhance the penetrating ability of tumor cells through endothelial cells and basement membrane into blood vessels. BSP **antibodies** can specifically hinder this effect in an in vivo system.
CT Medical Descriptors:
*breast cancer: ET, etiology
*cancer cell
*metastasis
protein function
cell migration
in vitro study
in vivo study
cancer invasion
blood vessel
genetic transfection
quantitative analysis
cell count
endothelium cell
incubation time
inoculation
chorioallantois
chicken
vascularization
polymerase chain reaction
cell membrane potential
basement membrane
human
controlled study
human cell
article
nucleotide sequence
Drug Descriptors:
*sialoprotein: EC, endogenous compound
matrigel
3,4 methylenedioxyamphetamine
complementary DNA: EC, endogenous compound
protein antibody
primer DNA

genomic DNA
RN (matrigel) 119978-18-6; (3,4 methylenedioxyamphetamine) **4764-17-4**
GEN GENBANK J05213 referred number

L39 ANSWER 23 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2003337524 EMBASE
TI Evaluation of immunoassays for the determination of MDMA and cannabinoids in urine samples.
AU Lua A.C.; Hu A.-R.; Lin B.-F.; Yeh P.-C.; Lin H.-R.; Tseng Y.-T.
CS A.C. Lua, Department of Medical Technology, Tzu Chi University, 701 Section 3, Chung Yan Road, Hualien, Taiwan 970, China. ahai@mail.tcu.edu.tw
SO Journal of Food and Drug Analysis, (2003) 11/2 (108-113).
Refs: 28
ISSN: 1021-9498 CODEN: YSFEEP
CY Taiwan,Province of China
DT Journal; Article
FS 027 Biophysics, Bioengineering and Medical Instrumentation
032 Psychiatry
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
049 Forensic Science Abstracts
LA English
SL English
AB Methylenedioxymethamphetamine (MDMA) is structurally related to methamphetamine (MA). There are many different commercially available immunoassay (IA) reagents for the initial screening of amphetamine and/or methamphetamine. These reagents may be employed to detect MDA/MDMA in urine samples. In order to select a suitable reagent for the initial screening of MDMA in urine samples, we evaluated 7 different amphetamine immunoassay reagents: Emit d.a.u. Monoclonal Amphetamine/Methamphetamine; Emit II Plus Monoclonal Amphetamine/Methamphetamine; Emit d.a.u. Amphetamine Class; DRI Amphetamine; AxSYM Amphetamine/Methamphetamine II; Abuscreen Online Amphetamine and Cedia Amphetamine/Ecstasy. We also determined the cross reactivity of these reagents with MDA, MDMA, MBDB, MDEA and other phenethylamines. These IA reagents were employed to screen a group of 146 urine samples collected from pub patrons. Results of the initial screening were compared with results obtained with gas chromatography/mass spectrometry (GC/MS). Five of the IA assays were acceptable for the initial screening of MDMA, except the Emit II Plus Monoclonal Amphetamine/Methamphetamine reagent and Emit d.a.u. Class Amphetamine reagent. Results obtained with Emit II reagent showed high false negatives, while results obtained with Emit d.a.u. Class reagent showed high false positives. We evaluated 5 different IA for cannabinoids. Results of the initial screening of 74 urine samples collected from pub patrons were compared with results obtained by GC/MS. There are 12 confirmed positives with GC/MS. Results obtained with DRI reagent showed no false negatives, while results obtained with Emit, Abuscreen Online, AxSYM and Cedia reagents have 4, 2, 3 and 4 false negatives, respectively.
CT Medical Descriptors:
*immunoassay
*urinalysis
screening
enzyme multiplied immunoassay technique
cross reaction
intermethod comparison
gas chromatography
mass spectrometry

laboratory diagnosis
human
controlled study
article
Drug Descriptors:
*3,4 methylenedioxymethamphetamine
*cannabinoid
methamphetamine
reagent
amphetamine
3,4 methylenedioxyamphetamine
monoclonal antibody
amphetamine derivative
n methyl 1 (3,4 methylenedioxyphenyl) 2 butanamine
n ethyl 3,4 methylenedioxyamphetamine
phenethylamine derivative
adrenergic receptor stimulating agent
central stimulant agent
designer drug
unclassified drug

RN (3,4 methylenedioxymethamphetamine) **42542-10-9**; (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (3,4 methylenedioxyamphetamine) **4764-17-4**; (n ethyl 3,4 methylenedioxyamphetamine) **14089-52-2**

NP (1) Emit-P; (2) Emit II; (3) Emit-M; (4) DRI Amphetamine; (5) AxSym; (6) Abuscreen Online Amphetamine; (7) Cedia

CO (3) Syva; (4) Synchron System; (5) Abbott; (6) Hoffmann La Roche; (7) Microgenics

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AN 2003447906 EMBASE

TI Drug addictions: Towards socially accepted and medically treatable diseases?

AU Pouletty P.

CS P. Pouletty, DrugAbuse Sciences, 25954 Eden Landing Road, Hayward, CA 94545-3816, United States. philippe@truffle-venture.com

SO Nature Reviews Drug Discovery, (2002) 1/9 (731-736).
Refs: 63
ISSN: 1474-1776 CODEN: NRDDAG

CY United Kingdom

DT Journal; Article

FS 036 Health Policy, Economics and Management
037 Drug Literature Index
038 Adverse Reactions Titles
039 Pharmacy
040 Drug Dependence, Alcohol Abuse and Alcoholism
052 Toxicology

LA English

SL English

AB What is the disease that affects more than 30 million individuals in the United States and Europe, is a leading cause of death and costs 2-3.5% of gross domestic product? The answer - alcohol abuse and drug addictions - still surprises many, and in general, addictions are undertreated. But advances in the understanding of the underlying biology and clinical manifestations of addictions are creating new opportunities for the development of novel pharmacotherapies to complement psychosocial interventions.

CT Medical Descriptors:
*drug dependence: DM, disease management
*drug dependence: DT, drug therapy
*drug dependence: ET, etiology
United States
cause of death
health care cost
alcohol abuse
pathology
clinical feature
psychosocial care
drug dependence treatment
drug mechanism
drug efficacy
cost effectiveness analysis
drug formulation
drug delivery system
side effect: SI, side effect
human
clinical trial
article
priority journal
Drug Descriptors:
alcohol
psychedelic agent
phencyclidine
cocaine
diamorphine: DT, drug therapy
diamorphine: PD, pharmacology
3,4 methylenedioxymethamphetamine
opiate
naltrexone: CT, clinical trial
naltrexone: DT, drug therapy
naltrexone: PR, pharmaceutics
naltrexone: PD, pharmacology
naltrexone: IM, intramuscular drug administration
naltrexone: PO, oral drug administration
acamprosate: CT, clinical trial
acamprosate: DT, drug therapy
acamprosate: PD, pharmacology
levacetylmethadol: DT, drug therapy
levacetylmethadol: PD, pharmacology
disulfiram: AE, adverse drug reaction
disulfiram: DT, drug therapy
disulfiram: PD, pharmacology
buprenorphine: CT, clinical trial
buprenorphine: CB, drug combination
buprenorphine: DT, drug therapy
buprenorphine: PD, pharmacology
methadone: DT, drug therapy
methadone: PD, pharmacology
adrogolide: CT, clinical trial
adrogolide: DT, drug therapy
adrogolide: PD, pharmacology
naloxone: CT, clinical trial
naloxone: CB, drug combination
naloxone: DT, drug therapy
naloxone: PD, pharmacology
drugs used in the treatment of addiction: CT, clinical trial

drugs used in the treatment of addiction: DV, drug development
drugs used in the treatment of addiction: DT, drug therapy
drugs used in the treatment of addiction: PE, pharmacoeconomics
ns 2359: CT, clinical trial
ns 2359: DT, drug therapy
ns 2359: PD, pharmacology
rpr 102681: CT, clinical trial
rpr 102681: DV, drug development
rpr 102681: DT, drug therapy
rpr 102681: PD, pharmacology
nicotine vaccine: DV, drug development
bp 897: CT, clinical trial
bp 897: DV, drug development
bp 897: DT, drug therapy
bp 897: PD, pharmacology
vigabatrin: DV, drug development
vigabatrin: PD, pharmacology
risperidone: DV, drug development
risperidone: PD, pharmacology
dexamphetamine: DV, drug development
dexamphetamine: PD, pharmacology
isradipine: DV, drug development
isradipine: PD, pharmacology
haloperidol: DV, drug development
haloperidol: PD, pharmacology
monoclonal antibody: DV, drug development
polyclonal antibody: DV, drug development
digoxin antibody
venom antiserum
unindexed drug
unclassified drug
diaphin
vivitrex
suboxone
berger

RN (alcohol) 64-17-5; (phencyclidine) 77-10-1, 956-90-1; (cocaine) 50-36-2, 53-21-4, 5937-29-1; (diamorphine) 1502-95-0, 561-27-3; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (opiate) 53663-61-9, 8002-76-4, 8008-60-4; (naltrexone) 16590-41-3, 16676-29-2; (acamprosate) 77337-73-6; (levacetylmethadol) 34433-66-4; (disulfiram) 97-77-8; (buprenorphine) 52485-79-7, 53152-21-9; (methadone) 1095-90-5, 125-56-4, 23142-53-2, 297-88-1, 76-99-3; (adrogolide) 166591-11-3; (naloxone) 357-08-4, 465-65-6; (vigabatrin) 60643-86-9; (risperidone) 106266-06-2; (dexamphetamine) 1462-73-3, 51-63-8, 51-64-9; (isradipine) 75695-93-1, 88977-22-4; (haloperidol) 52-86-8

CN (1) Campral; (2) Diaphin; (3) Campral; (4) Vivitrex; (5) Das 431; (6) Ns 2359; (7) Suboxone; (8) Suboxone; (9) Rpr 102681; (10) Bp 897; (11) Risperdal; (12) Dexedrine; (13) Dynacirc; (14) Haldol; Revia; Trexan; Antabuse; Berger

CO (1) Merck Lipha; (2) Diamo narcotics; (3) Forrest; (4) Alkermes; (5) DrugAbuse Sciences; (6) Neurosearch; (7) Reckitt Benckiser; (8) Schering Plough; (9) Aventis; (10) Bioproject; (11) Janssen; (12) Glaxo SmithKline; (13) Reliant; (14) Ortho Mcneil; Bristol Myers Squibb; Eon; Mallinckrodt; Mylan; Roxane; Odyssey; Watson; Eron; Barr Laboratories; Amide

L39 ANSWER 25 OF 51 EMBASE
on STN
AN 2002391619 EMBASE
TI Poisoning in children 5: Rare and dangerous poisons.

AU Riordan M.; Rylance G.; Berry K.
CS Dr. K. Berry, Emergency Department, Birmingham Children's Hospital, Steelhouse Lane, Birmingham B4 6NH, United Kingdom. kathleen.berry@bhamchildrens.wmids.nhs.uk
SO Archives of Disease in Childhood, (1 Nov 2002) 87/5 (407-410).
Refs: 21
ISSN: 0003-9888 CODEN: ADCHAK
CY United Kingdom
DT Journal; Conference Article
FS 007 Pediatrics and Pediatric Surgery
037 Drug Literature Index
038 Adverse Reactions Titles
052 Toxicology
LA English
SL English
AB Management of children who have ingested βblockers, digoxin, oral hypoglycaemics, organophosphates, carbon monoxide, cyanide, isopropanol, ethylene glycol, methanol, Ecstasy, LSD, cocaine, nicotine, and isoniazid.
CT Medical Descriptors:
*intoxication: DT, drug therapy
*intoxication: EP, epidemiology
*childhood injury: DT, drug therapy
*childhood injury: EP, epidemiology
beta adrenergic receptor blocking
hypoglycemia
drug effect
drug mechanism
bradycardia
hypotension
nausea
vomiting
hyperkalemia
heart arrhythmia
insect control
risk assessment
metabolic acidosis
cyanide poisoning
household
drug abuse
methemoglobinemia: SI, side effect
headache: SI, side effect
vasodilatation
muscle cramp: SI, side effect
arthralgia: SI, side effect
anaphylaxis: SI, side effect
human
child
conference paper
priority journal
Drug Descriptors:
*beta adrenergic receptor blocking agent: TO, drug toxicity
*digoxin: TO, drug toxicity
*oral antidiabetic agent: TO, drug toxicity
*organophosphate insecticide: TO, drug toxicity
*carbon monoxide: TO, drug toxicity
*cyanide: TO, drug toxicity
2 propanol: TO, drug toxicity
ethylene glycol: TO, drug toxicity
methanol: TO, drug toxicity

3,4 methylenedioxymethamphetamine: TO, drug toxicity
lysergide: TO, drug toxicity
cocaine: TO, drug toxicity
nicotine: TO, drug toxicity
isoniazid: TO, drug toxicity
activated carbon: PD, pharmacology
atropine: DT, drug therapy
lidocaine: DT, drug therapy
amiodarone: DT, drug therapy
phenytoin: DT, drug therapy
digoxin antibody: DT, drug therapy
sulfonylurea derivative: TO, drug toxicity
octreotide: TO, drug toxicity
metformin: TO, drug toxicity
acarbose: TO, drug toxicity
repaglinide: TO, drug toxicity
glucose: DT, drug therapy
glucose: PD, pharmacology
pralidoxime: DT, drug therapy
amyl nitrite: AE, adverse drug reaction
amyl nitrite: DT, drug therapy
sodium thiosulfate: AE, adverse drug reaction
sodium thiosulfate: DT, drug therapy
unindexed drug

RN (digoxin) 20830-75-5, 57285-89-9; (carbon monoxide) 630-08-0; (cyanide) 57-12-5; (2 propanol) 67-63-0; (ethylene glycol) 107-21-1; (methanol) 67-56-1; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (lysergide) 50-37-3; (cocaine) 50-36-2, 53-21-4, 5937-29-1; (nicotine) 54-11-5; (isoniazid) 54-85-3, 62229-51-0, 65979-32-0; (activated carbon) 64365-11-3, 82228-96-4; (atropine) 51-55-8, 55-48-1; (lidocaine) 137-58-6, 24847-67-4, 56934-02-2, 73-78-9; (amiodarone) 1951-25-3, 19774-82-4, 62067-87-2; (phenytoin) 57-41-0, 630-93-3; (octreotide) 83150-76-9; (metformin) 1115-70-4, 657-24-9; (acarbose) 56180-94-0; (repaglinide) 135062-02-1; (glucose) 50-99-7, 84778-64-3; (pralidoxime) 6735-59-7; (amyl nitrite) 463-04-7; (sodium thiosulfate) 10102-17-7, 7772-98-7, 8052-33-3

L39 ANSWER 26 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2002200339 EMBASE

TI Single LDL apheresis improves serum remnant-like particle-cholesterol, C-reactive protein, and malondialdehyde-modified-low-density lipoprotein concentrations in Japanese hypercholesterolemic subjects.

AU Kobayashi J.; Katsube S.; Shimoda M.; Furuhashi K.; Kitano S.; Masuda M.; Maruyama T.; Shinomiya M.

CS J. Kobayashi, Department of Internal Medicine, Chibaken Saiseikai Narashino Hosp., 1-1-1 Izumi Chou, Narashino, Chiba 275-0006, Japan. maryland95@angel.ne.jp

SO Clinica Chimica Acta, (2002) 321/1-2 (107-112).
Refs: 34
ISSN: 0009-8981 CODEN: CCATAR

PUI S 0009-8981(02)00103-1

CY Netherlands

DT Journal; Article

FS 003 Endocrinology
025 Hematology
029 Clinical Biochemistry

LA English

SL English

AB Background: Single low-density lipoprotein (LDL)-apheresis may affect

serum remnant-like particle-cholesterol (RLP-C), C-reactive protein (CRP) and malondialdehyde-modified (MDA)-LDL concentrations. Subjects and methods: Six subjects with hypercholesterolemia (five men, one woman) were involved in this study. Mean age and body mass index of the study subjects were 58±3.1 years and 23.6±2.07 kg/m(2), respectively. Five of the subjects were diagnosed as heterozygous familial hypercholesterolemia (FH) because of having both marked hypercholesterolemia and Achilles tendon xanthomas. LDL apheresis was introduced and continued using a dextran sulfate cellulose adsorption column technique every 2 weeks. Serum RLP-C was measured using an immunoaffinity mixed gel containing anti-apolipoprotein A-I and anti-apolipoprotein B monoclonal **antibody**. Serum CRP was measured by latex-enhanced assay. Serum MDA-LDL was measured using monoclonal **antibody** against MDA-LDL (ML25). Results: Combined treatment in the steady state pre-treatment yielded a total, LDL- and HDL-cholesterol, and TG concentrations of 5.39±0.81, 3.82±1.03, 1.24±0.29 and 0.92±0.43 mmol/l, respectively, and a post-treatment total, LDL- and HDL-cholesterol and TG concentrations of 2.79±0.37 (-48%, p<0.001), 1.63±0.29 (-57%, p<0.001), 1.18±0.26 (-5%, NS) and 0.23±0.11 mmol/l (-75%, p<0.001), respectively. Serum RLP-C and CRP concentrations showed a substantial reduction [-73%, p<0.05 for RLP-C; -56%, p<0.05 for CRP] during this procedure. In addition, LDL apheresis was found to also cause a marked reduction in serum MDA-LDL concentration (-61%, p<0.05). Conclusion: LDL-apheresis is an effective treatment for removing atherogenic factors RLP-C, CRP and MDA-LDL from sera. .COPYRGT. 2002 Published by Elsevier Science B.V.

CT Medical Descriptors:
*familial hypercholesterolemia: DI, diagnosis
Japan
concentration response
body mass
heterozygosity
apheresis
achilles tendon
antibody affinity
adsorption chromatography
reversed phase liquid chromatography
bioassay
steady state
reduction
diagnostic procedure
serum
human
male
female
clinical article
controlled study
adult
article
priority journal
Drug Descriptors:
*low density lipoprotein: EC, endogenous compound
*C reactive protein: EC, endogenous compound
*malonaldehyde
dextran sulfate
cellulose: EC, endogenous compound
latex
monoclonal antibody: EC, endogenous compound
3,4 methylenedioxyamphetamine

high density lipoprotein cholesterol: EC, endogenous compound
apolipoprotein A1: EC, endogenous compound
apolipoprotein B: EC, endogenous compound
RN (C reactive protein) 9007-41-4; (malonaldehyde) 542-78-9; (dextran sulfate) 9011-18-1, 9042-14-2; (cellulose) 61991-22-8, 68073-05-2, 9004-34-6; (3,4 methylenedioxyamphetamine) **4764-17-4**

L39 ANSWER 27 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2002305501 EMBASE
TI Normal breast epithelial cells induce apoptosis of breast cancer cells via Fas signaling.
AU Toillon R.-A.; Descamps S.; Adriaenssens E.; Ricort J.-M.; Bernard D.; Boilly B.; Le Bourhis X.
CS X. Le Bourhis, Lab. Biol. du Dev. (UPRES, EA 1033), SN3, Universite Sci./Technologies Lille, 59655 Villeneuve d'Ascq, Cedex, France. xuefen.lebourhis@univ-lille1.fr
SO Experimental Cell Research, (2002) 275/1 (31-43).
Refs: 53
ISSN: 0014-4827 CODEN: ECREAL
CY United States
DT Journal; Article
FS 016 Cancer
029 Clinical Biochemistry
037 Drug Literature Index
LA English
SL English
AB Fas/Fas ligand (Fas L) death pathway is an important mediator of apoptosis. Deregulation of Fas pathway is reported to be involved in the immune escape of breast cancer and the resistance to anti-cancer drugs. In this study, we demonstrated that conditioned medium by normal breast epithelial cells (NBEC-CM) induced apoptosis of MCF-7 and T-47D Fas-sensitive cells but had no effect on MDA-MB-231 Fas-resistant cells. Inhibition of PI3 kinase or NF-κB by specific inhibitors or transient transfections restored the sensitivity of MDA-MB-231 cells to NBEC-induced apoptosis. Moreover, the constitutive activation of NF-κB was controlled by PI3 kinase because inhibition of PI3 kinase reduced NF-κB activity. Inducible activation of NF-κB rendered MCF-7 cells resistant to NBEC-CM- and Fas agonist **antibody** -triggered apoptosis. Therefore, constitutive or inducible activation of PI3 kinase and/or NF-κB in breast cancer cells rendered them resistant to NBEC-triggered apoptosis. In addition, Fas neutralizing **antibody** and dominant negative Fas abolished NBEC-triggered apoptosis. Western blot and confocal microscopy analysis showed an increase of membrane Fas/Fas L when cells were induced into apoptotis by NBEC-CM. Taken together, these data show that NBEC induced apoptosis in breast cancer cells via Fas signaling. .COPYRGT. 2002 Elsevier Science (USA).
CT Medical Descriptors:
*breast carcinoma
*breast epithelium
*apoptosis
signal transduction
cancer cell
enzyme inhibition
reduction
enzyme activity
Western blotting
confocal microscopy

analytic method
human
controlled study
human cell
article
priority journal
Drug Descriptors:
***Fas antibody: EC, endogenous compound**
3,4 methylenedioxyamphetamine
immunoglobulin enhancer binding protein: EC, endogenous compound
protein kinase: EC, endogenous compound
neutralizing antibody: EC, endogenous compound
2 morpholino 8 phenylchromone
RN (3,4 methylenedioxyamphetamine) **4764-17-4**; (protein kinase) 9026-43-1; (2 morpholino 8 phenylchromone) 154447-36-6
CN Ly 294002

L39 ANSWER 28 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2001277834 EMBASE
TI Liver transplantation for ecstasy-induced fulminant hepatic failure.
AU De Carlis L.; De Gasperi A.; Slim A.O.; Giacomoni A.; Corti A.; Mazza E.; Di Benedetto F.; Lauterio A.; Arcieri K.; Maione G.; Rondinara G.F.; Forti D.
CS Dr. L. De Carlis, Divisione Chirurgia Generale, Ospedale Niguarda, 20162 Milan, Italy
SO Transplantation Proceedings, (2001) 33/5 (2743-2744).
Refs: 6
ISSN: 0041-1345 CODEN: TRPPA8
PUI S 0041-1345(01)02176-5
CY United States
DT Journal; Conference Article
FS 026 Immunology, Serology and Transplantation
037 Drug Literature Index
038 Adverse Reactions Titles
048 Gastroenterology
LA English
CT Medical Descriptors:
*liver transplantation
*liver failure: SU, surgery
*liver failure: SI, side effect
graft survival
liver injury: SI, side effect
liver function
graft rejection: PC, prevention
graft rejection: DT, drug therapy
anemia: SI, side effect
brain disease
histopathology
human
female
case report
adolescent
conference paper
priority journal
Drug Descriptors:
*3,4 methylenedioxymethamphetamine: AE, adverse drug reaction
azathioprine: DT, drug therapy
tsukubaenolide: DT, drug therapy

tsukubaenolide: AE, adverse drug reaction
cyclosporin A: DT, drug therapy
steroid: DT, drug therapy
thymocyte antibody: DT, drug therapy

RN (3,4 methylenedioxymethamphetamine) **42542-10-9**; (azathioprine) 446-86-6; (tsukubaenolide) 104987-11-3; (cyclosporin A) 59865-13-3, 63798-73-2

CN Neoral

L39 ANSWER 29 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2002234390 EMBASE

TI Evolution pattern of auto-**antibodies** against oxidized low-density lipoproteins in renal transplant recipients.

AU Kandoussi A.-M.; Glowacki F.; Duriez P.; Tacquet A.; Fruchart J.-C.; Noel C.

CS A.-M. Kandoussi, Institut Pasteur de Lille, Inserm U 325, POB 245, F-59019 Lille Cedex, France. Abdelmejid.Kandoussi@pasteur-lille.fr

SO Nephron, (2001) 89/3 (303-308).
Refs: 30
ISSN: 0028-2766 CODEN: NPRNAY

CY Switzerland

DT Journal; Article

FS 028 Urology and Nephrology
029 Clinical Biochemistry

LA English

SL English

AB An increased degree of oxidative stress in renal transplant recipients and a possible role of ciclosporin A (Cs-A) immunosuppressive therapy in this process have already been described. However, prospective data using in vivo markers and the influence of Cs-A in the oxidizability of low-density lipoprotein (LDL) are scarce. We aimed at investigating in this prospective study the evolution pattern of auto-**antibodies** directed against malondialdehyde-modified LDL (MDA-LDL) and Cu(2+)-oxidized LDL in 28 stable renal transplant recipients on Cs-A immunosuppressive therapy before and after 3 successive years of renal transplantation. Also, the effect of enrichment of LDL with Cs-A on the susceptibility of LDL to in vitro oxidation was tested. The results showed a significant increase of both auto-**antibody** titres (MDA-LDL and Cu(2+)-oxidized LDL) after 1 year, and the values remained high during the 2nd and the 3rd year following transplantation. The yearly mean relative variations of auto-**antibodies** against MDA-LDL and Cu(2+)-oxidized LDL during the follow-up period were 133, 149, and 137%, and 111, 115, and 117%, respectively. A significant correlation was observed during the 1st year between Cs-A trough blood level and Cu(2+)-oxidized LDL auto-**antibody**: r = 0.04 (p = 0.046). Incorporation of Cs-A into LDL from healthy volunteers showed no changes during the lag phase in comparison with Cs-A-free LDL, indicating that Cs-A had no effect on in vitro LDL oxidizability. Our results suggest that Cs-A may be involved earlier in the LDL oxidation, but the mechanism by which it acts is still unclear. Copyright .COPYRGT. 2001 S. Karger AG, Basel.

CT Medical Descriptors:
*kidney transplantation
molecular evolution
kidney graft
recipient
prospective study
oxidation

immunosuppressive treatment
antibody titer
in vitro study
diagnostic test
diagnostic value
follow up
blood level
volunteer
regulatory mechanism
human
male
female
clinical article
controlled study
adolescent
adult
article
priority journal
Drug Descriptors:
***autoantibody: EC, endogenous compound**
*low density lipoprotein: EC, endogenous compound
3,4 methylenedioxyamphetamine
copper ion: EC, endogenous compound
RN (3,4 methylenedioxyamphetamine) **4764-17-4**

L39 ANSWER 30 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
AN 2000013857 EMBASE
TI Hair analysis by immunological methods from the beginning to 2000.
AU Spiehler V.
CS V. Spiehler, 422 Tustin, Newport Beach, CA 92663, United States
SO Forensic Science International, (2000) 107/1-3 (249-259).
Refs: 24
ISSN: 0379-0738 CODEN: FSINDR
PUI S 0379-0738(99)00168-1
CY Ireland
DT Journal; Conference Article
FS 026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
049 Forensic Science Abstracts
LA English
SL English
AB Immunoassays for hair testing must satisfy three requirements: (1) They must have cross-reactivity with parent drug and lipophilic metabolites actually found in hair (2) they must not experience interference from the dissolved hair matrix and (3) they must be titered for cutoffs appropriate to the drug concentrations found in hair. Because the analytes found in hair after drug use are generally the parent drug or its lipophilic metabolites, immunoassays developed and intended for urine testing are not suitable for hair. Immunoassays whose **antibodies** are bound to a solid support, such as coated-tube radioimmunoassay or coated-plate ELISA tests, experience less matrix interference than those which use other means of separation of bound and free fractions. Homogenous assays are not suitable for hair testing because the hair matrix frequently interferes in the detection of the signal. Historically radioimmunoassays for drugs of abuse were first used for detecting drugs in hair. Currently ELISAs and coated-plate 96 well microplate EIAs are employed for screening hair

digests or extracts for drugs. The optimum cutoffs for immunoassays for drugs in hair should be chosen based on the analyte concentration which produces the fewest false positive or false negative results when applied to tests of hair from known users and non-users of drugs. A hair immunoassay test at these cutoffs should have a sensitivity and specificity of better than 90%. The predictive value of the test will depend on the prevalence of drug use in the tested population. Cutoffs or decision thresholds for immunoassays used for screening for drugs should not be at the limit of detection of the assay because that produces a very large incidence of false positives. Because immunoassays are ligand-binding assays, they have a short range of linearity with low precision at both ends of the range. In the future, immunoassays will continue to be used for screening hair and other matrices for drugs of abuse because they provide rapid, inexpensive automated procedures for separating negative specimens from those which are suspected of containing drugs. For forensic purposes, all positive results must be confirmed by an independent analysis using a procedure based on a different property of the analyte. An immunoassay test should not be confirmed by a second immunoassay test but by a chromatographic test performed on a different dissolved or extracted aliquot of the original specimen.

CT Medical Descriptors:
*hair analysis
*immunoassay
radioimmunoassay
enzyme immunoassay
drug determination
enzyme linked immunosorbent assay
drug screening
body fluid
cross reaction
human
conference paper
priority journal
Drug Descriptors:
*cocaine: AN, drug analysis
*diamorphine: AN, drug analysis
*barbituric acid derivative: AN, drug analysis
*amphetamine: AN, drug analysis
*cannabis: AN, drug analysis
*benzodiazepine derivative: AN, drug analysis
morphine: AN, drug analysis
benzoylecgonine: AN, drug analysis
cyanamide: AN, drug analysis
amphetamine derivative: AN, drug analysis
3,4 methylenedioxymethamphetamine: AN, drug analysis
phentermine: AN, drug analysis
homococaine: AN, drug analysis
oxazepam: AN, drug analysis
butalbital: AN, drug analysis
pseudoephedrine: AN, drug analysis
secobarbital: AN, drug analysis
phenobarbital: AN, drug analysis
temazepam: AN, drug analysis
amobarbital: AN, drug analysis
secbutabarbital: AN, drug analysis
chlordiazepoxide: AN, drug analysis
diazepam: AN, drug analysis
unindexed drug

flunitrazepam: AN, drug analysis
flurazepam: AN, drug analysis
clonazepam: AN, drug analysis
clobazam: AN, drug analysis

RN (cocaine) 50-36-2, 53-21-4, 5937-29-1; (diamorphine) 1502-95-0, 561-27-3; (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (cannabis) 8001-45-4, 8063-14-7; (morphine) 52-26-6, 57-27-2; (benzoylecgonine) 519-09-5; (cyanamide) 151-51-9, 420-04-2; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (phentermine) 1197-21-3, 122-09-8; (homococaine) 529-38-4; (oxazepam) 604-75-1; (butalbital) 51005-25-5, 77-26-9; (pseudoephedrine) 345-78-8, 7460-12-0, 90-82-4; (secobarbital) 309-43-3, 76-73-3; (phenobarbital) 50-06-6, 57-30-7, 8028-68-0; (temazepam) 846-50-4; (amobarbital) 57-43-2, 64-43-7; (secbutabarbital) 125-40-6, 143-81-7; (chlordiazepoxide) 438-41-5, 58-25-3; (diazepam) 439-14-5; (flunitrazepam) 1622-62-4; (flurazepam) 1172-18-5, 17617-23-1; (clonazepam) 1622-61-3; (clobazam) 22316-47-8

L39 ANSWER 31 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2000414779 EMBASE

TI Protein phosphorylation cascades associated with methamphetamine-induced glial activation.

AU Hebert M.A.; O'Callaghan J.P.

CS Dr. J.P. O'Callaghan, Ctrs. for Dis. Control/Prevention, NIOSH, 1095 Willowdale Road, Morgantown, WV 26505-2888, United States. jdo5@cdc.gov

SO Annals of the New York Academy of Sciences, (2000) 914/- (238-262).
Refs: 179
ISSN: 0077-8923 CODEN: ANYAA

CY United States

DT Journal; Article

FS 008 Neurology and Neurosurgery
029 Clinical Biochemistry
037 Drug Literature Index
052 Toxicology

LA English

SL English

AB Reactive gliosis is the most prominent response to diverse forms of central nervous system (CNS) injury. The signaling events that mediate this characteristic response to neural injury are under intense investigation. Several studies have demonstrated the activation of phosphoproteins within the mitogen-activated protein kinase (MAPK) and Janus kinase (JAK) pathways following neural insult. These signaling pathways may be involved or responsible for the glial response following injury, by virtue of their ability to phosphorylate and dynamically regulate the activity of various transcription factors. This study sought to delineate, in vivo, the relative contribution of MAPK- and JAK-signaling components to reactive gliosis as measured by induction of glialfibrillary acidic protein (GFAP), following chemical-induced neural damage. At time points (6, 24, and 48 h) following methamphetamine (METH, 10 mg/kg x 4, s.c.) administration, female C57BL/6J mice were sacrificed by focused microwave irradiation, a technique that preserves steady-state phosphorylation. Striatal (target) and nontarget (hippocampus) homogenates were assayed for METH-induced changes in markers of dopamine (DA) neuron integrity as well as differences in the levels of activated phosphoproteins. GFAP upregulation occurred as early as 6 h, reaching a threefold induction 48 h following METH exposure. Neurotoxicant-induced reductions in striatal levels of DA and tyrosine hydroxylase (TH) paralleled the temporal profile of GFAP induction. Blots of striatal homogenates, probed with phosphorylation-state specific **antibodies**

, demonstrated significant changes in activated forms of extracellular-regulated kinase 1/2 (ERK 1/2), c-jun N-terminal kinase/stress-activated protein kinase (JNK/SAPK), MAPK/ERK kinase (MEK1/2), 70-kDa ribosomal S6 kinase (p70 S6), cAMP responsive element binding protein (CREB), and signal transducer and activator of transcription 3 (STAT3). MAPK-related phosphoproteins exhibited an activation profile that peaked at 6 h, remained significantly increased at 24, and fell to baseline levels 48 h following neurotoxicant treatment. The ribosomal S6 kinase was enhanced over 60% for all time points examined. Immunoreactivity profiles for the transcription factors CREB and STAT3 indicated maximal increases in phosphorylation occurring at 24 h, and measuring greater than 2- or 17-fold, respectively. Specific signaling events were found to occur with a time course suggestive of their involvement in the gliotic response. The toxicant-induced activation of these growth-associated signaling cascades suggests that these pathways could be obligatory for the triggering and/or persistence of reactive gliosis and may therefore serve as potential targets for modulation of glial response to neural damage.

CT Medical Descriptors:
*neurotoxicity: ET, etiology
*protein phosphorylation
central nervous system
dopaminergic system
enzyme activation
signal transduction
genetic transcription
gliosis
immunoblotting
high performance liquid chromatography
nonhuman
female
mouse
animal experiment
controlled study
animal tissue
article
Drug Descriptors:
*3,4 methylenedioxymethamphetamine: DO, drug dose
*3,4 methylenedioxymethamphetamine: TO, drug toxicity
*3,4 methylenedioxymethamphetamine: SC, subcutaneous drug administration
mitogen activated protein kinase
STAT3 protein
glial fibrillary acidic protein
phosphoprotein
dopamine

RN (3,4 methylenedioxymethamphetamine) **42542-10-9**; (mitogen activated protein kinase) 142243-02-5; (dopamine) 51-61-6, 62-31-7

CO Sigma (United States)

L39 ANSWER 32 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2000013851 EMBASE

TI Analysis of LSD in human body fluids and hair samples applying ImmunElute columns.

AU Rohrich J.; Zorntlein S.; Becker J.

CS J. Rohrich, Institut fur Rechtsmedizin, Johannes Gutenberg-University, Am Pulverturm 3, D-55131 Mainz, Germany

SO Forensic Science International, (2000) 107/1-3 (181-190).
Refs: 13

ISSN: 0379-0738 CODEN: FSINDR
PUI S 0379-0738(99)00162-0
CY Ireland
DT Journal; Conference Article
FS 026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
049 Forensic Science Abstracts
LA English
SL English

AB Immunoaffinity extraction units (LSD ImmunElute(TM)) are commercially available for the analysis of lysergic acid diethylamide (LSD) in urine. The ImmunElute resin contains immobilized monoclonal **antibodies** to LSD. We applied the ImmunElute procedure to serum and also to human hair samples. For hair analysis the samples were first extracted with methanol under sonication. The extracts were then purified using the ImmunElute resin. LSD analysis was carried out with HPLC and fluorescence detection. The immunoaffinity extraction provides highly purified extracts for chromatographic analysis. The limit of detection (signal-to-noise ratio=3) has been determined to be <50 pg regardless of which sample material was used. The procedure was applied to authentic hair samples from drug abusers (n=11). One of these samples tested positive with an amount of 110 pg LSD in 112 mg extracted hair corresponding to a concentration of 1 pg/mg. Copyright (C) 2000 Elsevier Science Ireland Ltd.

CT Medical Descriptors:
*hair analysis
*body fluid
*drug determination
high performance liquid chromatography
extraction
antibody affinity
analytic method
immunoaffinity chromatography
gas chromatography
mass spectrometry
human
clinical article
human tissue
conference paper
priority journal
Drug Descriptors:
*lysergide: AN, drug analysis
resin
opiate: AN, drug analysis
3,4 methylenedioxyamphetamine: AN, drug analysis
cocaine: AN, drug analysis
amphetamine derivative: AN, drug analysis
dihydrocodeine: AN, drug analysis
amphetamine: AN, drug analysis
3,4 methylenedioxymethamphetamine: AN, drug analysis
morphine: AN, drug analysis
codeine: AN, drug analysis
diamorphine: AN, drug analysis
RN (lysergide) 50-37-3; (opiate) 53663-61-9, 8002-76-4, 8008-60-4; (3,4 methylenedioxyamphetamine) **4764-17-4**; (cocaine) 50-36-2, 53-21-4, 5937-29-1; (dihydrocodeine) 125-28-0, 24204-13-5, 5965-13-9; (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (3,4 methylenedioxymethamphetamine) **42542-10-9**

; (morphine) 52-26-6, 57-27-2; (codeine) 76-57-3; (diamorphine) 1502-95-0, 561-27-3
NP LSD ImmunElute

L39 ANSWER 33 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 1998397605 EMBASE
TI Validation of an automated microplate enzyme immunoassay for screening of postmortem blood for drugs of abuse.
AU Spiehler V.R.; Collison I.B.; Sedgwick P.R.; Perez S.L.; Le S.D.; Farnin D.A.
CS V.R. Spiehler, Spiehler and Associates, Newport Beach, CA, United States
SO Journal of Analytical Toxicology, (1998) 22/7 (573-579).
Refs: 16
ISSN: 0146-4760 CODEN: JATOD3
CY United States
DT Journal; Article
FS 040 Drug Dependence, Alcohol Abuse and Alcoholism
052 Toxicology
LA English
SL English
AB The objective of this study was to compare the sensitivity and specificity of an enzyme immunoassay employing **antibodies** bound to a microtiter plate (MPEIA) with those of two radioimmunoassays for screening postmortem blood from selected coroner's cases for drugs of abuse. The radioimmunoassays were a coated-tube radioimmunoassay (CTRIA) and a double **antibody** radioimmunoassay (DARIA). Specimens consisted of 260 postmortem blood specimens from coroner's cases. Immunoassay results (positive or negative) were compared with confirmed results on those cases by gas chromatography-mass spectrometry, alone or in combination with gas-liquid chromatography using either a nitrogen-phosphorus or flame-ionization detector. Sensitivity was calculated as the true-positive rate using chromatographic confirmation as the reference standard. Specificity was calculated as the true-negative rate. Sensitivity and specificity were calculated for 5-7 potential cutoff concentrations for the drug classes opiates, amphetamines, cocaine and metabolites, and barbiturates. For opiates, the sensitivity and specificity were 99% and 93%, respectively, for the MPEIA at a cutoff of 20-ng/mL morphine, compared with 94% and 96% for the CTRIA at a cutoff of 5-ng/mL morphine and >99% and 96% for the DARIA at 20- ng/mL morphine. For cocaine and metabolites, the sensitivity and specificity were 96% and 93%, respectively, for the MPEIA at 50-ng/mL benzoylecgonine, compared with 93% and 96% for CTRIA at 50-ng/mL benzoylecgonine and 98% and 97% for the DARIA at 50-ng/mL benzoylecgonine. For amphetamines, the sensitivity and specificity were >99% and 91%, respectively, for the MPEIA at 25-ng/mL methamphetamine, compared with 93% and 86% for the CTRIA at 25- ng/mL methamphetamine and 83% and 89% for the DARIA at 50-ng/mL methamphetamine. For barbiturates, the sensitivity and specificity were >99% and 92%, respectively, for the MPEIA at 50-ng/mL secobarbital, compared with 91% and 87% for the CTRIA at 500-ng/mL secobarbital and 79% and 95% for the DARIA at a cutoff of 1000-ng/mL phenobarbital.
CT Medical Descriptors:
*enzyme immunoassay
*drug abuse
antibody detection
validation process
radioimmunoassay
gas chromatography
mass spectrometry

automation
receiver operating characteristic
cross reaction
human
human cell
article
Drug Descriptors:
*opiate: TO, drug toxicity
*cocaine: TO, drug toxicity
*amphetamine: TO, drug toxicity
*barbituric acid derivative: TO, drug toxicity
benzoylecgonine: TO, drug toxicity
methamphetamine: TO, drug toxicity
secobarbital: TO, drug toxicity
phenobarbital: TO, drug toxicity
homococaine: TO, drug toxicity
diamorphine: TO, drug toxicity
3,4 methylenedioxymethamphetamine: TO, drug toxicity
ephedrine: TO, drug toxicity
butalbital: TO, drug toxicity
amobarbital: TO, drug toxicity
pseudoephedrine: TO, drug toxicity

RN (opiate) 53663-61-9, 8002-76-4, 8008-60-4; (cocaine) 50-36-2, 53-21-4, 5937-29-1; (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (benzoylecgonine) 519-09-5; (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (secobarbital) 309-43-3, 76-73-3; (phenobarbital) 50-06-6, 57-30-7, 8028-68-0; (homococaine) 529-38-4; (diamorphine) 1502-95-0, 561-27-3; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (ephedrine) 299-42-3, 50-98-6; (butalbital) 51005-25-5, 77-26-9; (amobarbital) 57-43-2, 64-43-7; (pseudoephedrine) 345-78-8, 7460-12-0, 90-82-4

NP coated tube radioimmunoassay; **double antibody radioimmunoassay**

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AN 1998336098 EMBASE

TI Amphetamines in hair by enzyme-linked immunosorbent assay.

AU Sweeney S.A.; Kelly R.C.; Bourland J.A.; Johnson T.; Brown W.C.; Lee H.; Lewis E.

CS R.C. Kelly, Associated Pathologists Laboratories, 4230 S. Burnham Avenue, Las Vegas, NV 89119, United States

SO Journal of Analytical Toxicology, (1998) 22/6 (418-424).
Refs: 23
ISSN: 0146-4760 CODEN: JATOD3

CY United States

DT Journal; Article

FS 005 General Pathology and Pathological Anatomy
040 Drug Dependence, Alcohol Abuse and Alcoholism

LA English

SL English

AB Human hair was collected from the occipital crown region of the head from several subjects; these hair samples were presumptively positive for amphetamines by a previously evaluated immunoassay. Hair was washed briefly with methanol to remove external contamination, then extracted with hot methanol for 2 h to recover the drugs. The extracts were evaporated to dryness, reconstituted in buffer, and analyzed using a new enzyme-linked immunosorbent assay (ELISA) technique adapted for the detection of amphetamines in hair. Gas chromatography-mass spectrometry was used as the reference technique. Cross-reactivity of several related

compounds was evaluated by equating the inverse of the ligand concentration at 50% **antibody** binding to the affinity constant for each compound. The ratio of a compound's affinity constant to that for d-methamphetamine was used to derive percent cross-reactivity. These experiments yielded values of 30.8% for d- amphetamine, 7.4% for I-methamphetamine, 4.3% for phentermine, 2.9% for/- amphetamine, and <1% for ephedrine, methylenedioxyamphetamine, and methylenedioxymethamphetamine. Cross-reactivity of unrelated compounds was found to be non-existent. The optimum cutoff concentration was determined by receiver operating characteristic curve analysis to be 300 pg/mg and the observed limit of detection was 60 pg/mg. Intra-assay precision at 300 pg/mg was 3.3% (coefficient of variation, CV), and the interassay CV was 10.5%. The sensitivity and specificity of the method were 83% and 92%, respectively.

CT Medical Descriptors:
*hair
*enzyme linked immunosorbent assay
gas chromatography
mass spectrometry
cross reaction
receiver operating characteristic
human
controlled study
human tissue
article
Drug Descriptors:
*amphetamine derivative
*methamphetamine
*dexamphetamine
*amphetamine
*3,4 methylenedioxyamphetamine
methanol
antibody
ligand
phentermine
ephedrine

RN (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (dexamphetamine) 1462-73-3, 51-63-8, 51-64-9; (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (3,4 methylenedioxyamphetamine) **4764-17-4**; (methanol) 67-56-1; (phentermine) 1197-21-3, 122-09-8; (ephedrine) 299-42-3, 50-98-6

L39 ANSWER 35 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 1999003994 EMBASE

TI Serotonin transporters are located on the axons beyond the synaptic junctions: Anatomical and functional evidence.

AU Zhou F.C.; Tao-Cheng J.-H.; Segu L.; Patel T.; Wang Y.

CS F.C. Zhou, Department of Anatomy, Medical Neurobiology Program, Indiana Univ. School of Medicine, 635 Barnhill Drive, Indianapolis, IN 46202, United States. imce100@iupui.edu

SO Brain Research, (14 Sep 1998) 805/1-2 (241-254).
Refs: 72
ISSN: 0006-8993 CODEN: BRREAP

PUI S 0006-8993(98)00691-X

CY Netherlands

DT Journal; Article

FS 001 Anatomy, Anthropology, Embryology and Histology

LA English

SL English

AB The serotonin (5-HT) transporter (5-HTT) is known to play a role in depression and many 5-HT related diseases, and is the target site for drugs of abuse, such as cocaine, MDMA, and methamphetamine. The major role of the 5-HTT has long been considered to be to inactivate serotonin transmission through the elimination of serotonin at release sites. However, immunocytochemistry using an **antibody** against the N-terminal of the 5-HTT at the light microscopic (LM) level indicates that the 5-HTT is associated not only with 5-HT varicosities but also with axons. Electron microscopy (EM) reveals that the majority of the 5-HTTs exist on the axolemma outside the synaptic junctions. In studying whether axonal 5-HTTs are involved in the uptake of 5-HT, we found with autoradiography that [3H]citalopram bound to all major 5-HT fibers, not only in the terminal regions, but also in 5-HT axonal bundles such as the cingulum bundle and medial forebrain bundle. Furthermore, voltammetry recordings indicated that serotonin axonal bundles were actively engaged in high affinity serotonin uptake. The evidence indicates that 5-HTTs on 5-HT axons away from the synapse are likely to be functional in a manner similar to the terminal 5-HTT for serotonin uptake. It also suggests that the role of the 5-HTT may not only be for the termination of synaptic transmission, but also for the regulation of 5-HT through extrasynaptic (volume) transmission. Our findings may also impact the understanding of the sites of action of selective serotonin reuptake inhibitors and drug entry into serotonin neurons via the numerous axonal sites.

CT Medical Descriptors:
*synaptic transmission
*serotonin uptake
*serotoninergic nerve
*anatomy
serotonin release
electron microscopy
cingulate gyrus
medial forebrain bundle
immunocytochemistry
potentiometry
autoradiography
nonhuman
male
rat
animal experiment
controlled study
animal tissue
article
priority journal
Drug Descriptors:
*serotonin transporter: EC, endogenous compound
cocaine
3,4 methylenedioxymethamphetamine
methamphetamine
citalopram

RN (cocaine) 50-36-2, 53-21-4, 5937-29-1; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (citalopram) 59729-33-8

L39 ANSWER 36 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 97268302 EMBASE

DN 1997268302

TI Brain serotonin neurotoxicity and primary pulmonary hypertension from

fenfluramine and dexfenfluramine: A systematic review of the evidence.
AU McCann U.D.; Seiden L.S.; Rubin L.J.; Ricaurte G.A.
CS Dr. U.D. McCann, Unit on Anxiety Disorders, Biological Psychiatry Branch, National Institute of Mental Health, 10 Center Dr, Bethesda, MD 20892-1272, United States. umccann@helix.nih.gov
SO Journal of the American Medical Association, (1997) 278/8 (666-672).
Refs: 107
ISSN: 0098-7484 CODEN: JAMAAP
CY United States
DT Journal; General Review
FS 008 Neurology and Neurosurgery
015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English
AB Objectives. - Obesity is an important clinical problem, and the use of dexfenfluramine hydrochloride for weight reduction has been widely publicized since its approval by the Food and Drug Administration. However, animal and human studies have demonstrated toxic effects of fenfluramines that clinicians should be aware of when considering prescribing the drugs. Our purpose was to systematically review data on brain serotonin neurotoxicity in animals treated with fenfluramines and the evidence linking fenfluramines to primary pulmonary hypertension (PPH). Data Sources. - Archival articles and reviews identified through a computerized search of MEDLINE from 1966 to April 1997 using 'fenfluramine(s),' 'serotonin,' 'neurotoxicity,' 'behavior,' 'anorexigens,' 'weight loss,' and 'primary pulmonary hypertension' as index terms. Study Selection. - Reports dealing with long-term effects of fenfluramines on brain serotonin neurons, body weight, and pulmonary function in animals and humans. Data Extraction. - Reports were reviewed by individuals with expertise in serotonin neurobiology, neurotoxicity, neuropsychiatry, and pulmonary medicine and evaluated for appropriateness for inclusion in this review. Data Synthesis. - Fenfluramines cause dose-related, long-lasting reductions in serotonin axonal markers in all the animal species tested and with all the routes of drug administration used. Doses of fenfluramines that produce signs of brain serotonin neurotoxicity in animals are on the same order as those used to treat humans for weight loss when one takes into account known relations between body mass and drug clearance. However, no human studies have been conducted, and the pathological and clinical potential for neurotoxicity in humans is unknown. Appetite suppressants-most commonly fenfluramines-increase the risk of developing PPH (odds ratio, 6.3), particularly when used for more than 3 months (odds ratio, >20). Conclusions. - Fenfluramine and dexfenfluramine have been demonstrated to damage brain serotonin neurons in animal studies. It is not known if such damage occurs in humans or if there are clinical consequences. Use of fenfluramines is associated with an increased risk of PPH. Future studies should address the long-term consequences of prolonged use of fenfluramines.
CT Medical Descriptors:
*brain
*neurotoxicity: DI, diagnosis
*neurotoxicity: ET, etiology
*neurotoxicity: SI, side effect
*pulmonary hypertension: ET, etiology
*pulmonary hypertension: DT, drug therapy
*pulmonary hypertension: SI, side effect
*pulmonary hypertension: SU, surgery

*pulmonary hypertension: EP, epidemiology
*serotoninergic nerve cell
body mass
clinical feature
dose response
drug brain level
drug efficacy
drug metabolism
drug safety
human
immunohistochemistry
intraperitoneal drug administration
intravenous drug administration
nonhuman
obesity: DT, drug therapy
obesity: DI, diagnosis
oral drug administration
priority journal
review
subcutaneous drug administration
transplantation
Drug Descriptors:
*aminorex: TO, drug toxicity
*aminorex: AE, adverse drug reaction
*dexfenfluramine: PK, pharmacokinetics
*dexfenfluramine: TO, drug toxicity
*dexfenfluramine: DO, drug dose
*dexfenfluramine: CR, drug concentration
*dexfenfluramine: AD, drug administration
*dexfenfluramine: AE, adverse drug reaction
*dexfenfluramine: DT, drug therapy
*fenfluramine: AD, drug administration
*fenfluramine: IT, drug interaction
*fenfluramine: CB, drug combination
*fenfluramine: CR, drug concentration
*fenfluramine: DO, drug dose
*fenfluramine: AE, adverse drug reaction
*fenfluramine: PK, pharmacokinetics
*fenfluramine: DT, drug therapy
*phentermine: DT, drug therapy
*phentermine: CB, drug combination
*phentermine: IT, drug interaction
*serotonin: EC, endogenous compound
3,4 methylenedioxymethamphetamine: TO, drug toxicity
5 hydroxyindoleacetic acid: EC, endogenous compound
5,6 dihydroxytryptamine: TO, drug toxicity
5,7 dihydroxytryptamine: TO, drug toxicity
amphetamine: TO, drug toxicity
anorexigenic agent: DO, drug dose
anorexigenic agent: CR, drug concentration
anorexigenic agent: CB, drug combination
anorexigenic agent: AD, drug administration
anorexigenic agent: AE, adverse drug reaction
anorexigenic agent: PK, pharmacokinetics
anorexigenic agent: DT, drug therapy
anorexigenic agent: IT, drug interaction
antibody
anticoagulant agent: DT, drug therapy
chloramphetamine: TO, drug toxicity

diuretic agent: DT, drug therapy
glial fibrillary acidic protein: EC, endogenous compound
neuromodulin: EC, endogenous compound
oxygen
potassium
prostacyclin: AD, drug administration
prostacyclin: DT, drug therapy
serotonin receptor: EC, endogenous compound
serotonin uptake inhibitor: AE, adverse drug reaction
structural protein: EC, endogenous compound
tricyclic antidepressant agent
tryptophan hydroxylase: EC, endogenous compound
vasodilator agent: AD, drug administration
vasodilator agent: DT, drug therapy

RN (aminorex) 13425-22-4, 2207-50-3; (dexfenfluramine) 3239-44-9, 3239-45-0; (fenfluramine) 404-82-0, 458-24-2; (phentermine) 1197-21-3, 122-09-8; (serotonin) 50-67-9; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (5 hydroxyindoleacetic acid) 1321-73-9, 54-16-0; (5,6 dihydroxytryptamine) 5090-36-8; (5,7 dihydroxytryptamine) 31363-74-3; (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (chloramphetamine) 64-12-0; (oxygen) 7782-44-7; (potassium) 7440-09-7; (prostacyclin) 35121-78-9, 61849-14-7; (tryptophan hydroxylase) 9037-21-2

CN (1) Redux; (2) Redux; (3) Pondimin

CO (1) Wyeth ayerst (United States); (2) Interneuron (United States); (3) Robins (United States)

L39 ANSWER 37 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 97269033 EMBASE

DN 1997269033

TI High level expression of equine herpesvirus 1 glycoproteins D and H and their role in protection against virus challenge in the C3H (H-2K(k)) murine model.

AU Stokes A.; Cameron R.S.; Marshall R.N.; Killington R.A.

CS A. Stokes, NERC IVEM, Mansfield Road, Oxford, OX1 3SR, United Kingdom. asto@mail.nerc-oxford.ac.uk

SO Virus Research, (1997) 50/2 (159-173).
Refs: 47
ISSN: 0168-1702 CODEN: VIREDF

PUI S 0168-1702(97)00067-1

CY Netherlands

DT Journal; Article

FS 004 Microbiology
026 Immunology, Serology and Transplantation

LA English

SL English

AB N and C-terminal truncated forms of equine herpesvirus 1 (EHV 1) glycoproteins gD and gH were expressed in baculovirus resulting in the production of secreted recombinant proteins. A carboxy-terminal histidine tag was included on each of the genes for protein isolation by nickel affinity chromatography. Recombinant gD was recognized by three gD specific monoclonal antibodies, 20C4, 5H6 and F3132. F3132 is a conformationally dependent monoclonal antibody with virus neutralizing activity. Expression of gH was confirmed by reacting the protein with the gH peptide specific antiserum R319. The truncated gD gene was also expressed as a β-galactosidase fusion protein which was purified from E. coli by nickel affinity chromatography C3H mice were inoculated with purified recombinant gD or gH or insect cells which had been infected with

recombinant baculoviruses. Mice were subsequently challenged with EHV 1. Purified recombinant baculovirus gD provided the most protection and produced high **eve** s of virus neutralizing **antibodies**. The gD fusion protein was less effective at protecting mice and insect cells infected with either of the recombinant baculoviruses or purified recombinant gH were poor at conferring protection. The results emphasize the importance of using purified proteins in vaccine formulations and of including EHV 1 gD as a component of a subunit vaccine.

CT Medical Descriptors:
*equine herpes virus
*virus infection
animal experiment
animal model
article
controlled study
immunization
mouse
nonhuman
priority journal
protection
Drug Descriptors:
*hybrid protein
*neutralizing antibody: EC, endogenous compound
*recombinant protein
*virus glycoprotein: EC, endogenous compound
*virus vaccine
beta galactosidase

L39 ANSWER 38 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 96049997 EMBASE
DN 1996049997
TI Comparison of polyclonal and monoclonal assays for routine screening of urines for amphetamines.
AU Moore F.M.L.; Jarvie D.R.; Simpson D.
CS Department of Clinical Biochemistry, The Royal Infirmary,Edinburgh EH3 9YW, United Kingdom
SO Annals of Clinical Biochemistry, (1996) 33/1 (78-81).
ISSN: 0004-5632 CODEN: ACBOBU
CY United Kingdom
DT Journal; Article
FS 037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
052 Toxicology
LA English
CT Medical Descriptors:
*drug screening
*drug urine level
*enzyme multiplied immunoassay technique
article
clinical trial
drug dependence
human
intermethod comparison
major clinical study
priority journal
Drug Descriptors:
*amphetamine
***monoclonal antibody**

***polyclonal antibody**
3,4 methylenedioxymethamphetamine
ephedrine
phenylpropanolamine
pseudoephedrine
RN (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (3,4 methylenedioxymethamphetamine) **42542-10-9** ; (ephedrine) 299-42-3, 50-98-6; (phenylpropanolamine) 14838-15-4, 154-41-6, 4345-16-8, 48115-38-4; (pseudoephedrine) 345-78-8, 7460-12-0, 90-82-4

L39 ANSWER 39 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 95074977 EMBASE
DN 1995074977
TI Immunological approach to investigating membrane cell damages induced by lipoperoxidative stress: Application to far UV-irradiated erythrocytes.
AU Petit E.; Divoux D.; Chancerelle Y.; Kergonou J.F.; Nouvelot A.
CS Laboratoire de Neurosciences, URA 1829-CNRS, Bd Henri Becquerel,14052 Caen, Cedex, France
SO Biological Trace Element Research, (1995) 47/1-3 (17-28).
ISSN: 0163-4984 CODEN: BTERDG
CY United States
DT Journal; Conference Article
FS 005 General Pathology and Pathological Anatomy
029 Clinical Biochemistry
LA English
SL English
AB Oxygen-reactive species are being described as agents responsible for cell degeneration mechanisms resulting from membrane, enzyme, and nuclear alterations. Lipid peroxidation on its own is considered to be one of the consequences of the free radicals attack, and among the different reactive aldehydes that can be formed from the decomposition of lipid peroxides, the most extensively assayed have been malondialdehyde (MDA). However, the different techniques currently used for MDA assay (HPLC, GLC) are barely sensitive enough to follow its production at the cellular level. In order to develop an immunofluorescent technique able to detect cellular damages provoked by lipoperoxidation, polyclonal **antibodies** against lysozyme modified by MDA treatment have been raised in rabbits. We show that this immunserum recognizes specifically all the MDA-treated proteins tested, but not the intact proteins or the proteins treated by other aldehydes. Moreover, we demonstrate using an ELISA technique that the amount of immunoreactive proteins in MDA-treated membrane erythrocytes is proportional to the concentration of MDA applied, suggesting that this assay may represent a quantitative method of determination of lipoperoxidative alterations. In addition, when coupled to an indirect fluorophore **antibody** (FITC), the immunserum allows a precise location of these modified proteins within the membranes of erythrocytes in which lipid peroxidation was initiated by far UV irradiation. In summary, the interest of this work is to provide an immunological probe that can precociously detect membrane damages induced by MDA, regardless of the cell type and prooxidant (physiological or pathological) conditions.
CT Medical Descriptors:
*cell damage
*lipid peroxidation
animal experiment
conference paper
controlled study

enzyme linked immunosorbent assay
erythrocyte ghost
human
human cell
immunoblotting
immunofluorescence microscopy
immunoreactivity
membrane damage
nonhuman
oxidative stress
polyacrylamide gel electrophoresis
protein modification
ultraviolet irradiation
Drug Descriptors:
3,4 methylenedioxyamphetamine
aldehyde
lysozyme
polyclonal antibody
polypeptide

RN (3,4 methylenedioxyamphetamine) **4764-17-4**; (lysozyme) 9001-63-2

L39 ANSWER 40 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 95162576 EMBASE
DN 1995162576
TI 125I radioimmunoassay for the dual detection of amphetamine and methamphetamine.
AU Ward C.; McNally A.J.; Rusyniak D.; Salamone S.J.
CS Intl. Drug Monitoring Business Unit, Roche Diagnostic Systems, Inc., 1080 US Highway 202,Branchburg, NJ 08876-1760, United States
SO Journal of Forensic Sciences, (1994) 39/6 (1486-1496).
ISSN: 0022-1198 CODEN: JFSCAS
CY United States
DT Journal; Article
FS 037 Drug Literature Index
040 Drug Dependence, Alcohol Abuse and Alcoholism
049 Forensic Science Abstracts
052 Toxicology
LA English
SL English
AB A radioimmunoassay that exhibits a nearly equivalent response to D-amphetamine and D-methamphetamine in urine over the assay range of 0 to 1000 ng/mL while displaying low cross-reactivity to L-amphetamine and L-methamphetamine (4.6% and 2.4%, respectively) has been developed. In addition, methylenedioxy-amphetamine (MDA) and methylenedioxymethamphetamine (MDMA) were detectable in the assay with cross-reactivity levels of >100% and 77% respectively. Little cross-reactivity was observed with the commonly encountered over-the-counter (OTC) drags and this cross-reactivity was further reduced by the addition of sodium periodate into the reaction mixture to oxidize the β-hydroxylamines. The double (second) **antibody** assay uses 125I-radiolabeled derivatives of both D-amphetamine and D-methamphetamine as tracers in combination with two highly specific sheep antisera directed against D-amphetamine and D-methamphetamine. The assay exhibits a dose response of approximately 90,000 dpm from 0 to 1000 ng/mL of D-amphetamine or D-methamphetamine with a minimum detectable dose for either drag of approximately 25 ng/mL. With a cut-off level of 500 ng/mL, the assay gave a positive result for 100% of the 111 clinical samples containing GC/MS confirmed (at or above the NIDA GC/MS cut-off values)

levels of amphetamine and/or methamphetamine. Eighty eight samples that screened negative in a clinical laboratory were all negative in the assay. Nineteen samples which were incorrectly identified as positive by other commercially available amphetamine assays were negative in this RIA.

CT Medical Descriptors:
*drug cross reactivity
*drug screening
*radioimmunoassay
article
concentration response
controlled study
drug structure
gas chromatography
human
isotope labeling
mass spectrometry
priority journal
urinalysis
Drug Descriptors:
*amphetamine: AN, drug analysis
*amphetamine: DO, drug dose
*antigen: AN, drug analysis
*iodine 125
*methamphetamine: DO, drug dose
*methamphetamine: AN, drug analysis
*periodate sodium
*tracer: AN, drug analysis
3,4 methylenedioxyamphetamine
3,4 methylenedioxymethamphetamine
4 (2 aminopropyl) n [2 (4 hydroxyphenyl)ethyl]benzenebutanamide: AN, drug analysis
benzene derivative: AN, drug analysis
ephedrine
hydroxyamphetamine
n [2 (4 hydroxyphenyl)ethyl] 4 [2 (methylamino)propyl]benzenebutanamide: AN, drug analysis
n [4 [4 (2 aminopropyl)phenyl] 1 oxobutyl]lysyl bovine thyroglobulin: AN, drug analysis
n [4 [4 [2 (methylamino)propyl]phenyl] 1 oxobutyl]lysyl bovine thyroglobulin: AN, drug analysis
norpseudoephedrine
phenethylamine
phentermine
phenylpropanolamine
propylhexedrine
pseudoephedrine
tyramine
unclassified drug

RN (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (iodine 125) 14158-31-7, 22822-81-7; (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (periodate sodium) 7790-28-5; (3,4 methylenedioxyamphetamine) **4764-17-4**; (3,4 methylenedioxymethamphetamine) **42542-10-9**; (ephedrine) 299-42-3, 50-98-6; (hydroxyamphetamine) 103-86-6, 1518-86-1, 306-21-8; (norpseudoephedrine) 2153-98-2, 36393-56-3, 492-39-7; (phenethylamine) 64-04-0; (phentermine) 1197-21-3, 122-09-8; (phenylpropanolamine) 14838-15-4, 154-41-6, 4345-16-8, 48115-38-4; (propylhexedrine) 101-40-6, 3595-11-7, 532-52-5, 6192-97-8; (pseudoephedrine) 345-78-8, 7460-12-0, 90-82-4; (tyramine) 51-67-2, 60-19-5

CO Sigma; Amersham

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AN 94286546 EMBASE

DN 1994286546

TI The endogenous vascular elastase that governs development and progression of monocrotaline-induced pulmonary hypertension in rats is a novel enzyme related to the serine proteinase adipsin.

AU Zhu L.; Wigle D.; Hinek A.; Kobayashi J.; Ye C.; Zuker M.; Dodo H.; Keeley F.W.; Rabinovitch M.

CS Division of Cardiovascular Research, Hospital for Sick Children, 555 University Avenue,Toronto, Ont. M5G 1X8, Canada

SO Journal of Clinical Investigation, (1994) 94/3 (1163-1171).
ISSN: 0021-9738 CODEN: JCINAO

CY United States

DT Journal; Article

FS 005 General Pathology and Pathological Anatomy
006 Internal Medicine
007 Pediatrics and Pediatric Surgery
015 Chest Diseases, Thoracic Surgery and Tuberculosis
018 Cardiovascular Diseases and Cardiovascular Surgery

LA English

SL English

AB We showed previously a cause and effect relationship between increased activity of an endogenous vascular elastase (EVE) and experimentally induced pulmonary hypertension in rats. We now report the isolation and characterization of EVE. Degenerate oligonucleotides synthesized to homologous sequences in serine elastases were used in a PCR with rat pulmonary artery (PA) cDNA. The PCR product hybridized to a 1.2-kb mRNA and the intensity of hybridization was threefold increased in RNA from rat hypertensive PA at a timepoint when EVE activity was increased. The PCR product was used to screen a cDNA library and sequences obtained encoded rat adipsin. We then used immunoaffinity to purify **EVE**. An **antibody** to the elastin-binding protein was used to remove this competitor of elastase from the PA extract and the elastolytic activity increased 100-fold. The enzyme was purified using an antibody that recognizes NH2-terminal sequences of serine proteinases and the eluate was further purified using an antibody raised against recombinant adipsin. A single band at 20 kD immunoreactive with the adipsin antibody was resolved as an active enzyme on an elastin substrate gel. Immunogold labeling with an antibody to an adipsin peptide sequence localized EVE to PA smooth muscle cells. This is the first isolation of EVE; it appears to be a novel enzyme related to the serine proteinase adipsin originally found in adipose tissue.

CT Medical Descriptors:
*pulmonary hypertension
animal tissue
article
enzyme activity
nonhuman
pathophysiology
priority journal
pulmonary artery
rat
vascular smooth muscle
Drug Descriptors:
*adipsin
*elastase

*serine proteinase
RN (adipsin) 104118-48-1; (elastase) 9004-06-2; (serine proteinase) 37259-58-8

L39 ANSWER 42 OF 51 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 90330367 EMBASE
DN 1990330367
TI Detection of D,L-amphetamine, D,L-methamphetamine, and illicit amphetamine analogs using Diagnostic Products Corporation's amphetamine and methamphetamine radioimmunoassay.
AU Cody J.T.
CS Air Force Drug Testing Laboratory, Brooks AFB, TX 78235-5000, United States
SO Journal of Analytical Toxicology, (1990) 14/5 (321).
ISSN: 0146-4760 CODEN: JATOD3
CY United States
DT Journal; Note
FS 029 Clinical Biochemistry
052 Toxicology
LA English
SL English
AB Cross-reactivity with Diagnostic Products Corporation (DPC) amphetamine and methamphetamine radioimmunoassay (RIA) reagents was determined for amphetamine, methamphetamine, and a number of amphetamine analogs. Concentrations from 100 to 100,000 ng/mL were assayed. 3,4-Methylenedioxyamphetamine (MDA) and 3,4-methylenedioxymethamphetmaine (MDMA) showed significant cross-reactivity for the amphetamine and methamphetamine reagents respectively. 4-Hydroxymethamphetamine, 3,4-methylenedioxyethylamphetamine (MDEA), and N,N-dimethyl-MDA also showed significant cross-reactivity with the methamphetamine reagents, but less than MDMA. None of the other analogs showed a positive result with the amphetamine or methamphetamine reagents at even the highest concentration, although several did show measurable cross-reactivity. The L isomers of amphetamine and methamphetamine showed substantially less cross-reactivity than the D forms to which the respective **antibody** systems are targeted.
CT Medical Descriptors:
*amphetamine analog
*radioimmunoassay
drug analysis
nonhuman
methodology
note
priority journal
Drug Descriptors:
*amphetamine
*methamphetamine
3,4 methylenedioxyamphetamine
3,4 methylenedioxymethamphetamine
illicit drug
RN (amphetamine) 1200-47-1, 139-10-6, 156-34-3, 2706-50-5, 300-62-9, 51-62-7, 60-13-9, 60-15-1; (methamphetamine) 28297-73-6, 51-57-0, 537-46-2, 7632-10-2; (3,4 methylenedioxyamphetamine) **4764-17-4**; (3,4 methylenedioxymethamphetamine) **42542-10-9**

L39 ANSWER 43 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
AN 2003:381237 BIOSIS

DN PREV200300381237
TI (+) 3,4 - METHYLENEDIOXYMETHAMPHETAMINE ((+) - MDMA) INDUCES THE IMMEDIATE - EARLY GENE c - Fos IN THE PATCH AND MATRIX COMPARTMENTS OF THE RAT STRIATUM.
AU Frankel, P. S. [Reprint Author]; Szucs, R. P. [Reprint Author]; Herin, D. V. [Reprint Author]; Cunningham, K. A. [Reprint Author]
CS Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston, TX, USA
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002) Vol. 2002, pp. Abstract No. 901.8. http://sfn.scholarone.com. cd-rom. Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience. Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
DT Conference; (Meeting)
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 20 Aug 2003
Last Updated on STN: 20 Aug 2003
AB Most abused drugs including 3,4-methylenedioxymethamphetamine (MDMA, "ecstasy") evoke expression of the immediate-early gene (IEG) protein c-Fos in the rat striatum; however, little is known about the characteristics of the striatal cells expressing c-Fos. The striatum is divided into two compartments based upon inputs, outputs and genes expressed. These compartments are the patch (striosome; apprxeq15% of striatal volume) and the matrix (apprxeq85% of striatal volume). Amphetamine induces c-Fos in both striatal compartments and in the present study, we investigated the ability of the most behaviorally active isomer of MDMA ((+)-MDMA), to induce c-Fos in both striatal compartments; the patch compartment was differentiated from the matrix by labeling immunohistochemically with a mu opioid receptor **antibody**. Rats were injected with either saline, (+)-MDMA (1 or 10 mg/kg) or amphetamine (5 mg/kg) and perfused 2 hours later; the brains were processed immunohistochemically for the IEG c-Fos and the mu opioid receptor. (+)-MDMA significantly increased c-Fos expression in both the patch and matrix compartments in a dose-related manner. These results are the first demonstration that striatal cells in both compartments are sensitive to activation by (+)-MDMA, an effect shared with amphetamine. Activation of c-Fos expression in both striatal compartments suggests that striatal input and output pathways contribute extensively to the pattern of behavior evoked by (+)-MDMA.
CC General biology - Symposia, transactions and proceedings 00520
Genetics - General 03502
Genetics - Animal 03506
Biochemistry studies - General 10060
Pathology - Therapy 12512
Nervous system - Physiology and biochemistry 20504
Pharmacology - General 22002
Pharmacology - Neuropharmacology 22024
IT Major Concepts
Molecular Genetics (Biochemistry and Molecular Biophysics); Nervous System (Neural Coordination); Pharmacology
IT Parts, Structures, & Systems of Organisms
brain: nervous system; striatum: nervous system, matrix compartment, patch compartment
IT Chemicals & Biochemicals
MDMA: autonomic-drug, pharmacodynamics; amphetamine: autonomic-drug, pharmacodynamics; mu opioid receptor
ORGN Classifier
Muridae 86375

Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
rat (common)
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates
RN **42542-10-9** (MDMA)
300-62-9 (amphetamine)
GEN rat c-Fos gene (Muridae): expression, immediate-early gene, regulation

L39 ANSWER 44 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:206618 BIOSIS
DN PREV200400207134
TI Modulation of 5 - HT neurochemistry by S - glutathionylation: potential role in MDMA neurotoxicity.
AU Sakowski, S. A. [Reprint Author]; Sadidi, M.; Kuhn, D. M. [Reprint Author]
CS Ctr. for Molec Med. and Genet, Wayne State Univ. Sch. of Med, Detroit, MI, USA
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003) Vol. 2003, pp. Abstract No. 961.5. http://sfn.scholarone.com. e-file. Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New Orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 14 Apr 2004
Last Updated on STN: 14 Apr 2004
AB Tryptophan hydroxylase (TPH) is the initial and rate-limiting enzyme in the formation of the neurotransmitter serotonin. The neurotoxic amphetamine MDMA causes significant reductions in TPH activity. Though the mechanisms by which MDMA affects TPH and damages the serotonin neuronal system have not been determined, oxidative stress has been implicated as an underlying mechanism. MDMA intoxication has also been associated with alterations in glutathione (GSH) levels and function. Therefore, we hypothesized that GSH could be interacting with reactive species to modify TPH. Diamide, a thiol-specific oxidant used to mimic oxidative stress, slightly inhibits TPH activity. This inhibition is significantly enhanced by GSH. GSSG, the oxidized form of GSH, also inhibits TPH activity. This inhibition by GSH-diamide can be prevented by reducing agents and antioxidants and is partially reversed by dithiothreitol (DTT). Treatment of TPH with GSH-diamide, or with GSSG, results in the binding of GSH to the enzyme as revealed by immunoblotting with an **antibody** against GSH-modified proteins. These post-translational modifications caused by GSH-diamide and GSSG are prevented and reversed by DTT and establish that TPH is modified by S-glutathionylation, the formation of a disulfide linkage between GSH and protein cysteine residues. The reactive nitrogen species peroxynitrite and nitrogen dioxide, in the presence of GSH, also cause S-glutathionylation of TPH. S-nitrosothiols such as GSNO or GSNO2, which are formed when peroxynitrite interacts with GSH, both inhibit TPH and cause S-glutathionylation. S-glutathionylation represents a new mechanism by which serotonin neurochemistry can be regulated and represents a probable mechanism by which TPH is inhibited in vivo by neurotoxic amphetamines.
CC General biology - Symposia, transactions and proceedings 00520
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Endocrine - Neuroendocrinology 17020

Nervous system - Physiology and biochemistry 20504
Nervous system - Pathology 20506
Toxicology - General and methods 22501
Immunology - General and methods 34502
IT Major Concepts
Nervous System (Neural Coordination)
IT Parts, Structures, & Systems of Organisms
serotonin neuronal system: nervous system
IT Diseases
intoxication: toxicity
IT Diseases
neurotoxicity: nervous system disease
IT Chemicals & Biochemicals
5-HT [serotonin]; DTT [dithiothreitol]; GSH [glutathione]; GSSG; MDMA; S-nitrosothiols; amphetamine; **antibodies**; antioxidants; diamide; neurotransmitters; nitrogen dioxide; peroxynitrite; reactive nitrogen species
IT Methods & Equipment
immunoblotting: immunologic techniques, laboratory techniques
IT Miscellaneous Descriptors
neurochemistry
RN 50-67-9 (5-HT)
50-67-9 (serotonin)
3483-12-3 (DTT)
3483-12-3 (dithiothreitol)
70-18-8 (GSH)
70-18-8 (glutathione)
42542-10-9 (MDMA)
300-62-9 (amphetamine)
10465-78-8 (diamide)
10102-44-0 (nitrogen dioxide)
19059-14-4 (peroxynitrite)
7727-37-9 (reactive nitrogen species)

L39 ANSWER 45 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2001:131172 BIOSIS
DN PREV200100131172
TI Ecstasy induced severe acute hepatitis among young adults.
AU Akhras, Jamil [Reprint author]; Kinzie, Joseph L. [Reprint author]
CS Wayne State University, Detroit, MI, USA
SO American Journal of Gastroenterology, (September, 2000) Vol. 95, No. 9, pp. 2558-2559. print.
Meeting Info.: 65th Annual Scientific Meeting of the American College of Gastroenterology. New York, New York, UK. October 13-18, 2000. American College of Gastroenterology.
CODEN: AJGAAR. ISSN: 0002-9270.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 14 Mar 2001
Last Updated on STN: 15 Feb 2002
CC Biochemistry studies - Proteins, peptides and amino acids 10064
General biology - Symposia, transactions and proceedings 00520
Behavioral biology - Human behavior 07004
Biochemistry studies - General 10060
Biochemistry studies - Porphyrins and bile pigments 10065
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Diagnostic 12504
Digestive system - Physiology and biochemistry 14004

Digestive system - Pathology 14006
Urinary system - Physiology and biochemistry 15504
Integumentary system - Pathology 18506
Psychiatry - Psychopathology, psychodynamics and therapy 21002
Toxicology - General and methods 22501
IT Major Concepts
Gastroenterology (Human Medicine, Medical Sciences); Toxicology
IT Parts, Structures, & Systems of Organisms
liver: digestive system, echogenicity; stool: digestive system, clay-colored; urine: excretory system, dark color
IT Diseases
anorexia: behavioral and mental disorders
Anorexia (MeSH)
IT Diseases
jaundice: digestive system disease
Jaundice (MeSH)
IT Diseases
nausea: digestive system disease
Nausea (MeSH)
IT Diseases
pruritus: integumentary system disease
Pruritus (MeSH)
IT Diseases
severe acute hepatitis: digestive system disease, toxicity, treatment
IT Chemicals & Biochemicals
ALT [alanine aminotransferase]; AMA [anti-mitochondrial **antibody**]; ANA [anti-nuclear **antibody**]; ASMA [anti-smooth muscle **antibody**]; AST [aspartate transaminase]; HCV Ab [hepatitis C virus **antibody**]; HCV PCR/RNA [hepatitis C virus polymerase chain reaction/RNA]; HEV Ab [hepatitis E virus **antibody**]; albumin; alcohol: toxin; alkaline phosphatase; bilirubin; ecstasy: toxicity; hepatitis A **antibody**; hepatitis B core **antibody** [HbcAb]; hepatitis B surface **antibody** [HbsAb]; hepatitis B surface antigen [HbsAg]
IT Methods & Equipment
PT [prothrombin time]: diagnostic method; abdominal ultrasound: imaging method
IT Miscellaneous Descriptors
clay-colored stool; lethargy; Meeting Abstract
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human: Caucasian, adult, female, patient
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 64-17-5 (alcohol)
9001-78-9 (alkaline phosphatase)
635-65-4 (bilirubin)
42542-10-9 (ecstasy)
9000-86-6 (ALANINE AMINOTRANSFERASE)

L39 ANSWER 46 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2000:365197 BIOSIS
DN PREV200000365197
TI Effect of MDMA on microtubule-associated protein 2 (MAP2) in the rat brain: An ELISA study.
AU Meller, R. [Reprint author]; Zetterstrom, T. [Reprint author]; Mechan, A.

O. [Reprint author]; Green, A. R. [Reprint author]; Elliott, J. M. [Reprint author]
CS School of Pharmacy, DeMontfort University, Leicester, LE3 0QL, UK
SO European Journal of Neuroscience, (2000) Vol. 12, No. Supplement 11, pp. 206. print.
Meeting Info.: Meeting of the Federation of European Neuroscience Societies. Brighton, UK. June 24-28, 2000.
ISSN: 0953-816X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
Conference; (Meeting Poster)
LA English
ED Entered STN: 23 Aug 2000
Last Updated on STN: 8 Jan 2002
CC Pharmacology - General 22002
Cytology - Animal 02506
Pathology - Therapy 12512
Nervous system - Physiology and biochemistry 20504
Toxicology - General and methods 22501
General biology - Symposia, transactions and proceedings 00520
IT Major Concepts
Nervous System (Neural Coordination); Pharmacology; Toxicology
IT Parts, Structures, & Systems of Organisms
hippocampus: nervous system; neuronal dendrites: nervous system; serotoninergic neurons: nervous system
IT Chemicals & Biochemicals
3,4-methylenedioxymethamphetamine [MDMA, ecstasy]; microtubular associated protein 2
IT Methods & Equipment
ELISA: **antibody** detection method
IT Miscellaneous Descriptors
synaptic density; Meeting Abstract; Meeting Poster
ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
rat: male, strain-Dark Agouti
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates
RN **42542-10-9** (3,4-methylenedioxymethamphetamine)
42542-10-9 (MDMA)
42542-10-9 (ecstasy)

L39 ANSWER 47 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1996:311430 BIOSIS
DN PREV199699033786
TI Distinct pharmacological properties and distribution in neurons and endocrine cells of two isoforms of the human vesicular monoamine transporter.
AU Erickson, Jeffrey D. [Reprint author]; Schaefer, Martin K. H.; Bonner, Tom I.; Eiden, Lee E.; Weihe, Eberhard
CS Building 36, Room 3A-17, National Inst. Mental Health/National Inst. Health, Bethesda, MD 20892, USA
SO Proceedings of the National Academy of Sciences of the United States of America, (1996) Vol. 93, No. 10, pp. 5166-5171.
CODEN: PNASA6. ISSN: 0027-8424.
DT Article

LA English
ED Entered STN: 11 Jul 1996
Last Updated on STN: 11 Jul 1996
AB A second isoform of the human vesicular monoamine transporter (hVMAT) has been cloned from a pheochromocytoma cDNA library. The contribution of the two transporter isoforms to monoamine storage in human neuroendocrine tissues was examined with isoform-specific polyclonal **antibodies** against hVMAT1 and hVMAT2. Central, peripheral, and enteric neurons express only VMAT2. VMAT1 is expressed exclusively in neuroendocrine, including chromaffin and enterochromaffin, cells. VMAT1 and VMAT2 are coexpressed in all chromaffin cells of the adrenal medulla. VMAT2 alone is expressed in histamine-storing enterochromaffin-like cells of the oxyntic mucosa of the stomach. The transport characteristics and pharmacology of each VMAT isoform have been directly compared after expression in digitonin-permeabilized fibroblastic (CV-1) cells, providing information about substrate feature recognition by each transporter and the role of vesicular monoamine storage in the mechanism of action of psychopharmacologic and neurotoxic agents in human. Serotonin has a similar affinity for both transporters. Catecholamines exhibit a 3-fold higher affinity, and histamine exhibits a 30-fold higher affinity, for VMAT2. Reserpine and ketanserin are slightly more potent inhibitors of VMAT2-mediated transport than of VMAT1-mediated transport, whereas tetrabenazine binds to and inhibits only VMAT2. N-methyl-4-phenylpyridinium, phenylethylamine, amphetamine, and methylenedioxymethamphetamine are all more potent inhibitors of VMAT2 than of VMAT1, whereas fenfluramine is a more potent inhibitor of VMAT1-mediated monamine transport than of VMAT2-mediated monoamine transport. The unique distributions of hVMAT1 and hVMAT2 provide new markers for multiple neuroendocrine lineages, and examination of their transport properties provides mechanistic insights into the pharmacology and physiology of amine storage in cardiovascular, endocrine, and central nervous system function.
CC Cytology - Human 02508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Biophysics - Molecular properties and macromolecules 10506
Biophysics - Membrane phenomena 10508
Movement 12100
Metabolism - Proteins, peptides and amino acids 13012
Digestive system - Physiology and biochemistry 14004
Endocrine - General 17002
Endocrine - Adrenals 17004
Endocrine - Neuroendocrinology 17020
Nervous system - Physiology and biochemistry 20504
Pharmacology - Neuropharmacology 22024
Toxicology - General and methods 22501
IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Digestive System (Ingestion and Assimilation); Endocrine System (Chemical Coordination and Homeostasis); Membranes (Cell Biology); Metabolism; Nervous System (Neural Coordination); Pharmacology; Toxicology
IT Chemicals & Biochemicals
RESERPINE; KETANSERIN; TETRABENAZINE; N-METHYL-4-PHENYLPYRIDINIUM; PHENYLETHYLAMINE; AMPHETAMINE; METHYLENEDIOXYMETHAMPHETAMINE; FENFLURAMINE; SEROTONIN; HISTAMINE
IT Miscellaneous Descriptors
ADRENAL MEDULLA; AMINE STORAGE; AMPHETAMINE; BINDING AFFINITY; CATECHOLAMINE; CENTRAL NEURON; CHROMAFFIN CELL; ENTERIC NEURON;

ENTEROCHROMAFFIN CELL; FENFLURAMINE; HISTAMINE; INHIBITION; KETANSERIN; METHYLENEDIOXYMETHAMPHETAMINE; N-METHYL-4-PHENYLPYRIDINIUM; NEUROTOXICITY; OXYNTIC MUCOSA; PERIPHERAL NEURON; PHENYLETHYLAMINE; RESERPINE; SEROTONIN; STOMACH; TETRABENAZINE

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Hominidae
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 50-55-5 (RESERPINE)
74050-98-9 (KETANSERIN)
58-46-8 (TETRABENAZINE)
48134-75-4 (N-METHYL-4-PHENYLPYRIDINIUM)
300-62-9 (AMPHETAMINE)
42542-10-9 (METHYLENEDIOXYMETHAMPHETAMINE)
458-24-2 (FENFLURAMINE)
50-67-9 (SEROTONIN)
51-45-6 (HISTAMINE)
64-04-0 (PHENYLETHYLAMINE)
54946-52-0 (METHYLENEDIOXYMETHAMPHETAMINE)

L39 ANSWER 48 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1994:177769 BIOSIS
DN PREV199497190769
TI TGF and TGF-beta-3 immunoreactivity within the ciliary epithelium.
AU Peress, Nancy S. [Reprint author]; Perillo, Edward
CS Dep. Pathol., State Univ. New York Stony Brook, BHS Tower 9, Stony Brook, NY 11794-8691, USA
SO Investigative Ophthalmology and Visual Science, (1994) Vol. 35, No. 2, pp. 453-457.
CODEN: IOVSDA. ISSN: 0146-0404.
DT Article
LA English
ED Entered STN: 26 Apr 1994
Last Updated on STN: 26 Apr 1994
AB Purpose. To determine whether the ciliary epithelium exhibits immunoreactivity for antibodies to transforming growth factor beta (TGF-beta) 2 and TGF-beta-3. The hypothesis was that because the aqueous humor contains mainly biologically active TGF-beta-2, with little TGF-beta-1, the epithelium largely responsible for its composition would also contain this isoform of TGF-beta. The authors anticipated TGF-beta-3 immunoreactivity because TGF-beta-3 often co-localizes with TGF-beta-2. Methods. The authors followed a standard immunohistochemical protocol using the avidin-biotin complex and newly available rabbit antibodies to synthetic peptide sequences of TGF-beta-2 and TGF-beta-3. Formalin-fixed, paraffin-embedded samples of freshly obtained rabbit and human autopsy eves were studied. Specificity was supported by specific peptide absorption of antisera before tissue incubation. Results. The pigmented and nonpigmented ciliary epithelia of rabbit and human **eves** were stained by **antibodies** to both TGF-beta-2 and TGF-beta-3, and the staining was inhibited by preabsorption of antibodies by peptides of TGF-beta-2 and TGF-beta-3. Conclusions. The authors conclude that the ciliary epithelium exhibits TGF-beta-2- and TGF-beta-3-like immunoreactivity that, based upon complementary work from other laboratories, is probably synthesized by this epithelium and is not simply absorbed by it from the aqueous humor.

CC Microscopy - Histology and histochemistry 01056
Cytology - Animal 02506
Cytology - Human 02508
Genetics - Animal 03506
Biochemistry methods - Proteins, peptides and amino acids 10054
Biochemistry methods - Carbohydrates 10058
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Molecular properties and macromolecules 10506
Biophysics - Membrane phenomena 10508
Endocrine - General 17002
Sense organs - Anatomy 20002
Sense organs - Physiology and biochemistry 20004
Immunology - General and methods 34502

IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Endocrine System (Chemical Coordination and Homeostasis); Genetics; Immune System (Chemical Coordination and Homeostasis); Membranes (Cell Biology); Sense Organs (Sensory Reception)

IT Miscellaneous Descriptors
OCULAR CYTOKINES; TRANSFORMING GROWTH FACTOR-BETA; TRANSFORMING GROWTH FACTOR-BETA-3

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGN Classifier
Leporidae 86040
Super Taxa
Lagomorpha; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
rabbit
Taxa Notes
Animals, Chordates, Lagomorphs, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

L39 ANSWER 49 OF 51 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1991:272222 BIOSIS
DN PREV199192004837; BA92:4837
TI ESTABLISHMENT CHARACTERIZATION AND APPLICATION OF MONOCLONAL **ANTIBODIES** AGAINST EEL VIRUS EUROPEAN **EVE**.
AU CHI S-C [Reprint author]; CHEN S-N; KOU G-H
CS DEP ZOOL, NATL TAIWAN UNIV, TAIPEI, TAIWAN
SO Fish Pathology, (1991) Vol. 26, No. 1, pp. 1-8.
CODEN: GYKEDT. ISSN: 0388-788X.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 13 Jun 1991
Last Updated on STN: 13 Jun 1991
AB A panel of six monoclonal **antibodies** (MAbs) against eel virus European (**EVE**) isolated from eel (Anguilla japonica) with branchionephritis was established in the present study. These systems have been applied for a rapid identification and presumptive serotyping of aquatic biravirus isolates using western immunoblot assay. Amongst these

six MAbs, four were demonstrated to be able to react with viral γ-polypeptide, whereas the other two were specific to viral β-polypeptide. Three MAbs identified epitopes that were highly conserved among members of AB serotype. One MAb recognizied an epitope present on AB and SP serotype strains. Two MAbs exhibit the common epitopes observed on AB, SP and VR299 serotypes of infectious pancreatic necrosis virus (IPNV). One of these two MAbs could react with all aquatic birnavirus isolates from various areas including Asia, North America and Europe. Six isolates from Asia exhibiting five varying reaction patterns were demonstrated to be distinct from AB, SP and VR299 serotypes.

CC Cytology - Animal 02506
Ecology: environmental biology - Wildlife management: aquatic 07516
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Methods and techniques 10504
Pathology - Inflammation and inflammatory disease 12508
Urinary system - Pathology 15506
Respiratory system - Pathology 16006
Virology - Animal host viruses 33506
Immunology - General and methods 34502
Immunology - Bacterial, viral and fungal 34504
Medical and clinical microbiology - Virology 36006
Medical and clinical microbiology - Serodiagnosis 36504
Chordata: general and systematic - Pisces 62510

IT Major Concepts
Cell Biology; Immune System (Chemical Coordination and Homeostasis); Infection; Microbiology; Pathology; Respiratory System (Respiration); Serology (Allied Medical Sciences); Systematics and Taxonomy; Urinary System (Chemical Coordination and Homeostasis); Wildlife Management (Conservation)

IT Miscellaneous Descriptors
ANGUILLA-JAPONICA BIRNAVIRUS VIRAL POLYPEPTIDE BRANCHIONEPHRITIS SEROTYPING WESTERN IMMUNOBLOT ASSAY FISHERY SIGNIFICANCE

ORGN Classifier
Rhabdoviridae 03504
Super Taxa
Negative Sense ssRNA Viruses; Viruses; Microorganisms
Taxa Notes
Microorganisms, Negative Sense Single-Stranded RNA Viruses, Viruses

ORGN Classifier
Osteichthyes 85206
Super Taxa
Pisces; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Fish, Nonhuman Vertebrates, Vertebrates

L39 ANSWER 50 OF 51 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2004-398544 [37] WPIX
CR 2003-723361 [69]
DNN N2004-317703 DNC C2004-149133
TI Novel amphetamine derivative compounds, useful as immunogens for producing antibodies specific for ecstasy-class of drugs, e.g. 3,4-methylenedioxy-N-ethylamphetamine.
DC B04 B05 D16 S03
IN BABURINA, I; HUI, R A; JORDAN, S; ROOT, R T; VITONE, S
PA (HOFF) ROCHE DIAGNOSTICS CORP
CYC 1
PI US 2004077021 A1 20040422 (200437)* 23
ADT US 2004077021 A1 CIP of US 2002-87612 20020301, US 2003-622524 20030718

PRAI US 2003-622524 20030718; US 2002-87612 20020301

AB US2004077021 A UPAB: 20040611

NOVELTY - An amphetamine derivative compound (C1) of formula (I), is new.

DETAILED DESCRIPTION - An amphetamine derivative compound (C1) of formula (I).

R1 = an alkyl group comprising 2-6 carbon atoms;

R2 = hydrogen, alkyl groups, or protecting groups;

R3 = optionally substituted alkyl group;

Z = L-X-Q;

L = a group comprising 1-15 carbon atoms and 0-6 heteroatoms;

X = O, CO, NR4, S, C(=NH)O, NH(CO), NH(CO)NH, NH(CS), NH(CS)NH, O(CO)NH, NH(C=NH), or maleimidothioether;

R4 = hydrogen or alkyl groups; and

Q = hydrogen, hydroxyl, leaving groups, macromolecular carriers, or labels.

INDEPENDENT CLAIMS are also included for:

(1) an antibody (Ab1) that preferentially binds 3,4-methylenedioxy-N-ethylamphetamine (MDEA) relative to other members of the ecstasy-class of drugs, where the antibody is a monoclonal antibody produced from a cell line NEAMP 48.2, ATCC designation PTA-5295, or is a monoclonal antibody produced from a cell line Cell line NEAMP 62.1, ATCC designation PTA-5294;

(2) cell line NEAMP 48.2, ATCC designation PTA-5295, producing a monoclonal **antibody** preferentially binding to **MDEA**;

(3) a monoclonal **antibody** that binds preferentially to **MDEA** in a manner equivalent to that of an antibody from cell line NEAMP 48.2, ATCC designation PTA-5295;

(4) cell line NEAMP 62.1, ATCC designation PTA-5294, producing a monoclonal **antibody** that preferentially binds to **MDEA**;

(5) a monoclonal **antibody** that binds preferentially to **MDEA** in a manner equivalent to that of an antibody from a cell line NEAMP 62.1, ATCC designation PTA-5294;

(6) an antibody generated in response to (C1); and

(7) a reagent kit comprising Ab1.

USE - (C1) is useful for producing an antibody specific for the amphetamine derivative which involves inoculating a host with an immunogen comprising (C1). Ab1 is useful for detecting an analyte in a sample, which involves contacting the sample with the antibody, binding the antibody to the analyte, and detecting a complex formed by the antibody and the analyte. The analyte is chosen from an amphetamine, an amphetamine derivative, an ecstasy-class drug (preferably MDEA), an ecstasy-class drug derivative or their derivatives (claimed).

ADVANTAGE - Antibodies produced in response to (C1), show particularly high recognition for the ecstasy-class drug MDEA, which is generally poorly detected by conventional amphetamine and methamphetamine immunoassays. The antibody thus produced can be used as a booster antibody to increase detection in an existing amphetamine or methamphetamine assay or as a separate **antibody** for **MDEA** in immunoassays for MD-class drugs.

Dwg.0/6

L39 ANSWER 51 OF 51 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2003-723361 [69] WPIX

CR 2004-398544 [37]

DNN N2003-578376 DNC C2003-199236

TI New methylenedioxy class of amphetamine derivatives useful as immunogen in the production of an antibody specific for ecstasy drugs.

DC B02 B04 D16 S03

IN HUI, R A; ROOT, R T; VITONE, S S

PA (HOFF) HOFFMANN LA ROCHE & CO AG F; (HOFF) ROCHE DIAGNOSTICS GMBH; (HOFF)

ROCHE DIAGNOSTICS CORP
CYC 34
PI EP 1340980 A1 20030903 (200369)* EN 34
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV
MC MK NL PT RO SE SI SK TR
CA 2419698 A1 20030901 (200369) EN
US 2003170917 A1 20030911 (200369)
JP 2004123692 A 20040422 (200428) 85
ADT EP 1340980 A1 EP 2003-3297 20030225; CA 2419698 A1 CA 2003-2419698 20030224; US 2003170917 A1 US 2002-87612 20020301; JP 2004123692 A JP 2003-49992 20030226
PRAI US 2002-87612 20020301
AB EP 1340980 A UPAB: 20040611
NOVELTY - Methylenedioxy class of amphetamine derivatives are new.
DETAILED DESCRIPTION - Methylenedioxy class of amphetamine derivatives of formula (I) are new.
R1 = 2-6C alkyl;
R2 = H, alkyl or a protecting group;
R3 = optionally substituted alkyl;
Z' = -L-X-Q;
L = 1-15C atoms and 0-6 heteroatoms;
X = -O-, -CO-, -NR4-, -S-, -C(=NH)O-, -NH(CO)-, -NH(CO)NH-, -NH(CS)-, NH(CS)NH-, -O(CO)NH-, -NH(C=NH)- or maleimidothioether;
R4 = H or alkyl; and
Q = H, hydroxyl, leaving group, macromolecular carrier or a label.
INDEPENDENT CLAIMS are included for the following:
(1) an antibody specific for 3,4-methylenedioxy-N-ethylamphetamine (MDEA) or an analyte (A) comprising (I);
(2) a reagent kit comprising the antibody;
(3) production of an antibody comprising inoculating a host with an immunogen containing (I);
(4) detection of (A) in a sample comprising:
(i) contacting the sample with the antibody;
(ii) binding the antibody to the analyte; and
(iii) detecting an adduct formed.
USE - As an immunogen in the production of an antibody specific for ecstasy drugs. The antibody produced can be used either as a booster antibody to increase detection in an existing amphetamine or methamphetamine assay or as a separate **antibody** for **MDEA** in immunoassay for MD-class drugs.
ADVANTAGE - (I) when used in immunoassays are relatively sensitive to and specific for ecstasy drugs. Antibodies produced from (I) show particularly high recognition for the ecstasy drug MDEA, which is generally poorly detected by conventional immunoassays.
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